

PowerLite® Pro Cinema 31000/61000
Home Theater Projector

User's Guide

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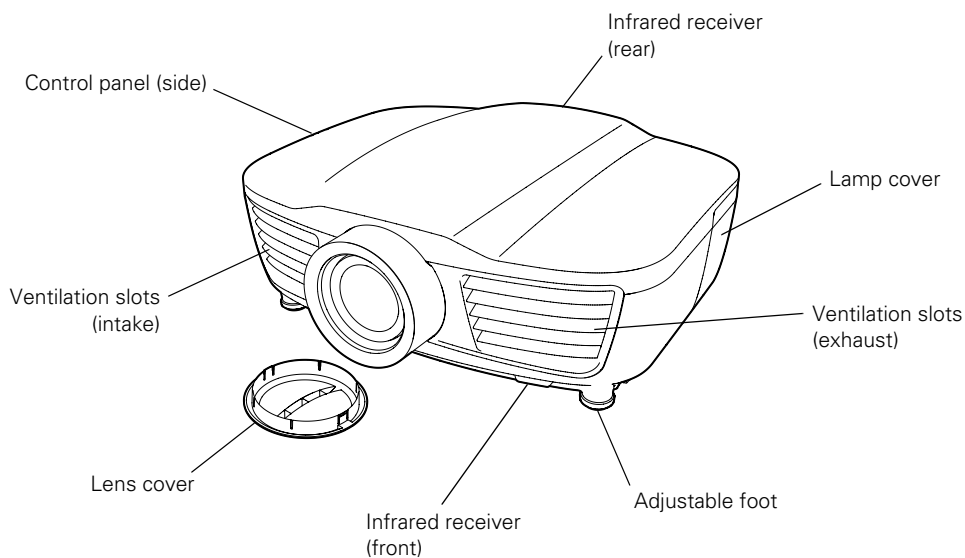
Introduction

The PowerLite® Pro Cinema 31000/61000 projector lets you enjoy theater-quality images in the relaxing environment of your own home. Designed especially for home cinema use, it offers these outstanding features:

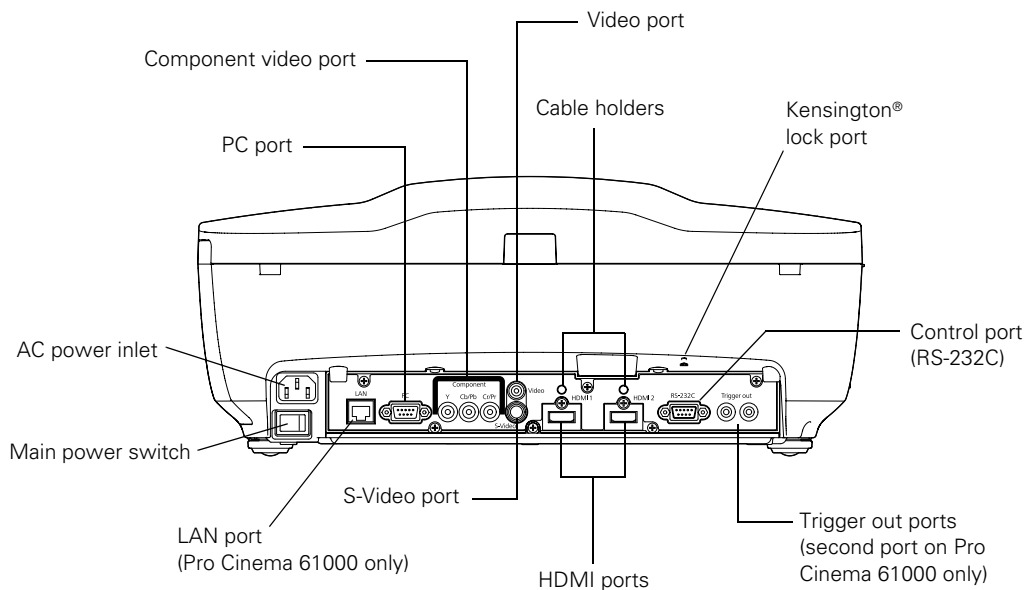
- Native 1080p (1920 × 1080) resolution, dynamic contrast ratio up to 1000000:1 (500000:1 for the Pro Cinema 31000), and up to 1200 lumens of brightness (white light output and color light output) for incredibly rich, sharp images in any room lighting
- Auto Iris system that constantly controls the light output based on the gamma and black/white levels of your projected content, for perfectly adjusted images and deepest blacks
- Epson® C²Fine™ 3LCD technology for reliable picture quality, increased contrast ratio and uniform colors
- 1080Perfect™ video processing using HQV® Reon-VX technology for more film-like images free of noise or artifacts
- 10-bit with partial 12-bit color quality for unmatched color accuracy, with over a billion colors available
- Epson AccuCinema™ color management delivered by the built-in optical Cinema Filter blocks out excess light for an expanded, purer color range and sophisticated grayscale tracking
- HDMI™ (High Definition Multimedia Interface™) port for superior, uncompressed digital video
- True 16:9 wide-format projection
- Flexible setup configurations, including front projection and ceiling mounted, with vertical and horizontal offset lens shift
- Five color modes, including x.v.Color™, to quickly optimize viewing for different lighting environments, and a vast array of custom color adjustments

Projector Parts

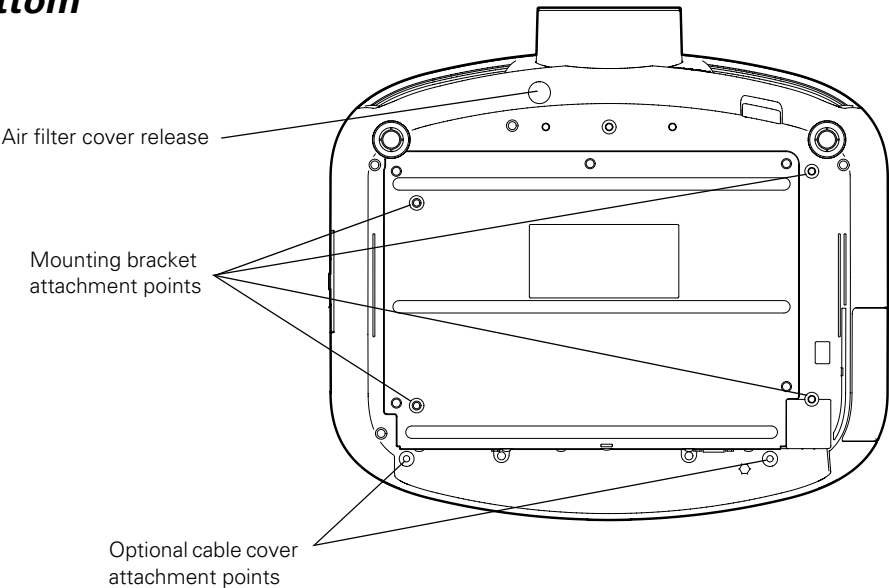
Front



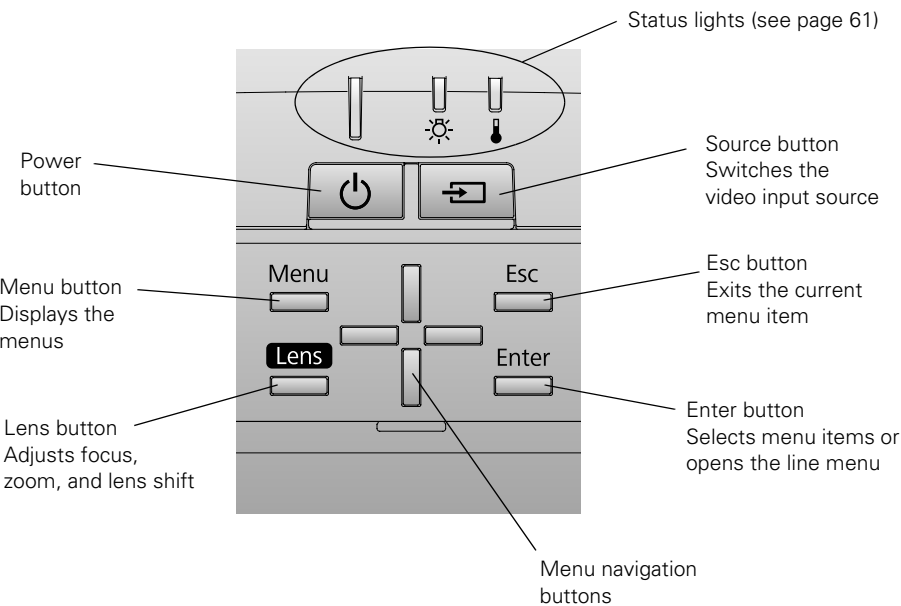
Back



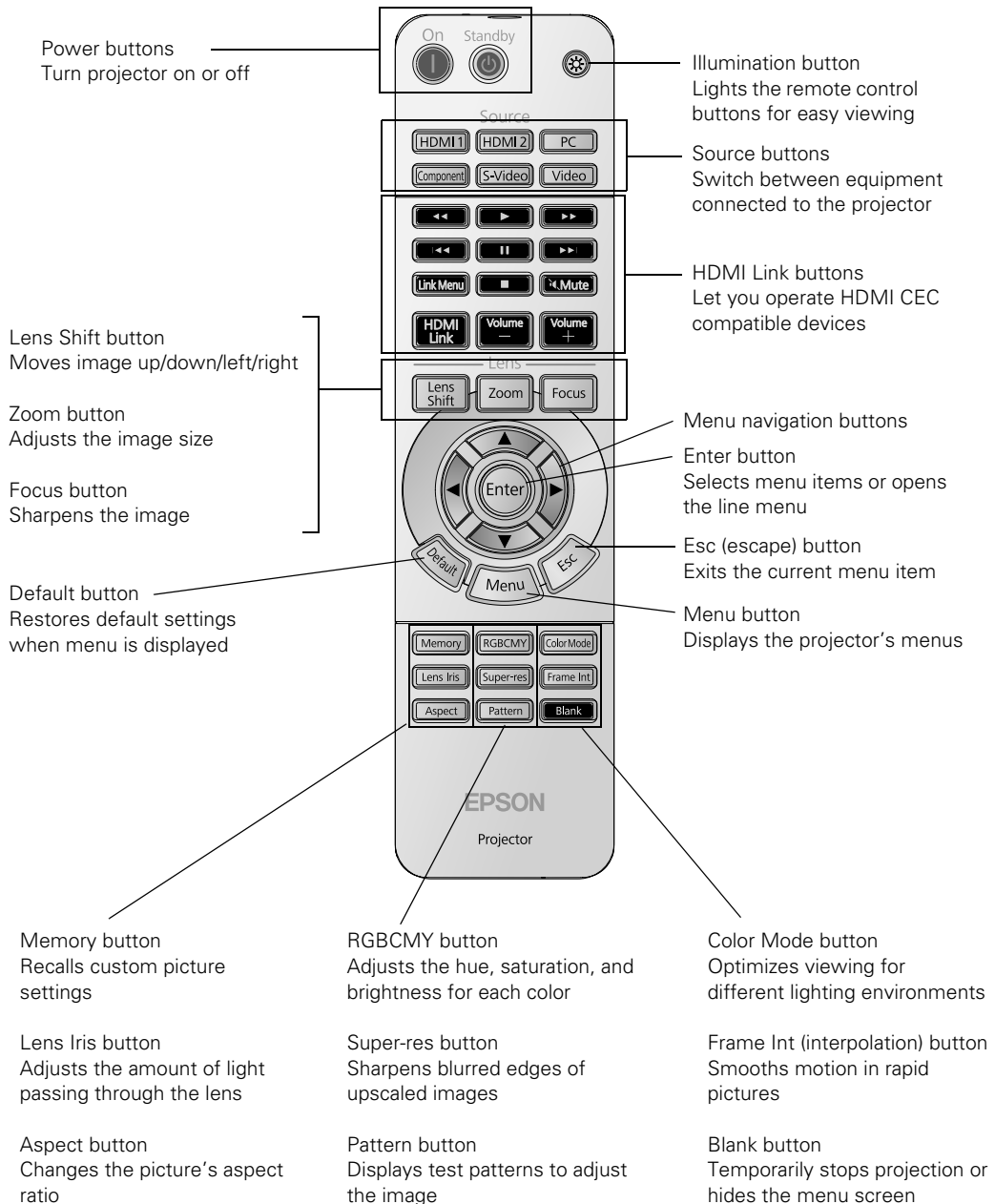
Bottom



Projector Control Panel



Remote Control



Optional Accessories

Epson provides the following optional accessories for the projector:

Product	Part number
Replacement lamp	V13H010L66
Air filter replacement	V13H134A28
Kensington security lock (anti-theft device)	ELPSL01
Cable cover	V12H003005
Projector mount	ELPHB800
Panamorph™ Fixed Anamorphic Lens Kit	ELPFALK
Panamorph Movable Anamorphic Lens Kit	ELPALK2

In addition to the accessories listed above, 1-year and 2-year extended service plans are available. You can purchase these plans and other accessories from an authorized Epson reseller. To find the nearest reseller, please call 800-GO-EPSON (800-463-7766). To purchase online, visit www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

Registration and Warranty

Your projector comes with a basic three-year carry-in warranty. For details, see page 79.

In addition, Epson offers free Extra CareSM Home Service. In the unlikely event of an equipment failure, you won't have to wait for your unit to be repaired. Instead, Epson will ship you a replacement unit anywhere in the United States, Canada, or Puerto Rico. See your *Extra Care Home Service* brochure for details.

To register, simply follow the registration instructions on the CD, or register online at www.epson.com/webreg. Registering also lets you receive special updates on new accessories, products, and service.

Using This Manual

This book contains all the information you need to use the projector, in addition to basic setup and maintenance instructions, troubleshooting tips, important safety instructions, specifications, and warranty information.

Please follow these guidelines as you read through the manual:

Warning: Must be followed carefully to avoid bodily injury.

Caution: Must be observed to avoid damage to your equipment.

Note: Contains important information about your projector.

Tip: Contains helpful projection tips.

Need additional help? Take advantage of Epson's automated support services 24 hours a day at www.epson.com/support (U.S.) or epson.ca/support (Canada). Use this site to view FAQs (Frequently Asked Questions) or product information and e-mail your questions to Epson support.

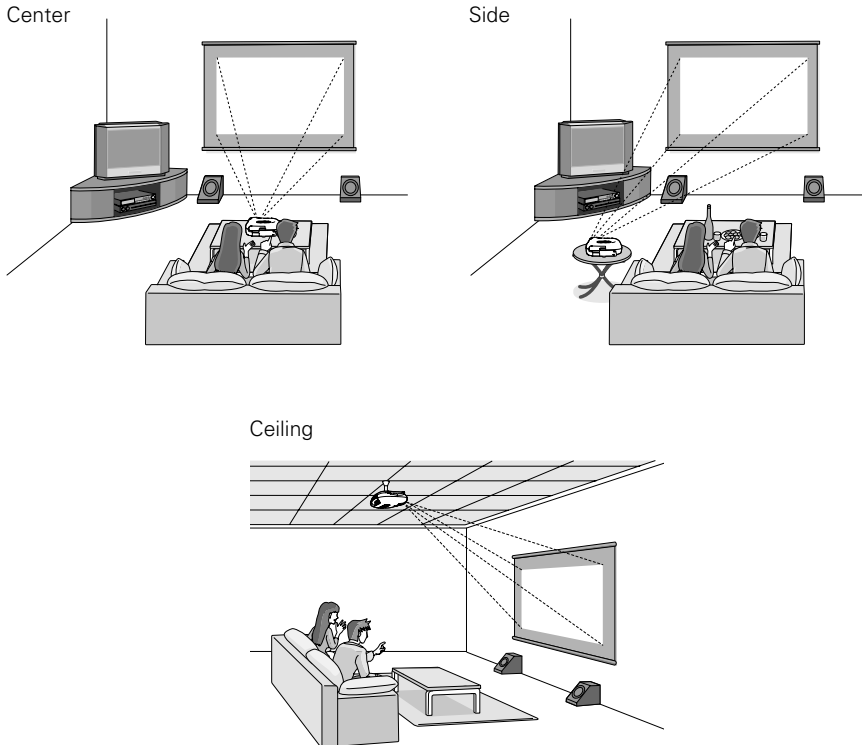
If you need more help, you can use the Epson PrivateLine® Support service. Call (800) 637-7661 and enter the PIN on the PrivateLine support card that came with your projector.

Setting Up the Projector

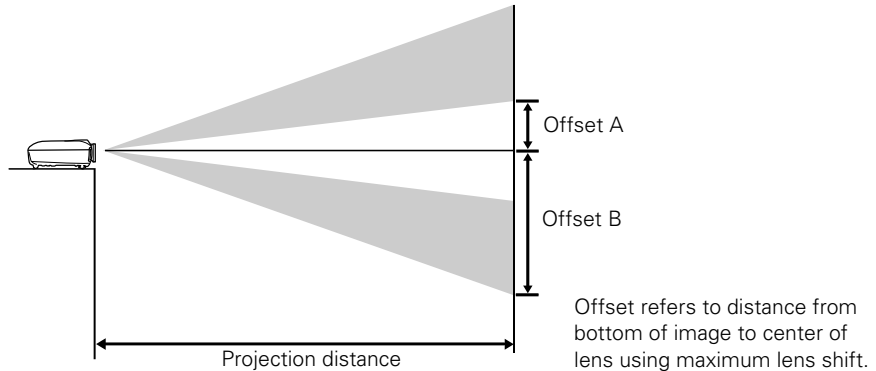
Follow the instructions in this section to choose a location for the projector, connect the cables, and display an image.

Choosing a Location

You can install the projector for the viewing setups shown below, as well as rear projection.



Ideally, keep the projector level and place it at a height so its lens is centered between the top and bottom of the screen, as shown below. If this is not possible, use the lens shift function to reposition the image (see page 23). As a rule of thumb, you can use lens shift to move the image up or down by nearly its full height, and left or right by about one-half its width (for details, see page 24).



If you place the projector off to the side, aim it straight ahead (rather than at the center of the screen), then use the horizontal lens shift to center the image on the screen.

Caution: Do not try to move the lens by hand, or you may damage the projector. Always use the lens shift function to change the lens position.

The size of the image is determined by the distance from the projector's lens to the screen. Depending on your display settings, the actual size may differ. Use these tables as a guide for projector placement:

16:9 aspect ratio

Projection distance	Diagonal image size (width × height)	Offset A	Offset B
2.7 to 5.9 feet 0.83 to 1.79 m	30 in. (26 × 15 in.) 76.2 cm (66 × 37 cm)	5.1 in. 13 cm	20.6 in. 52 cm
3.6 to 7.9 feet 1.11 to 2.40 m	40 in. (35 × 20 in.) 101.6 cm (89 × 50 cm)	7.8 in. 20 cm	27.5 in. 70 cm
5.5 to 11.8 feet 1.69 to 3.61 m	60 in. (51 × 28 in.) 152.4 cm (130 × 75 cm)	11.8 in. 30 cm	41.2 in. 105 cm
7.4 to 15.8 feet 2.26 to 4.82 m	80 in. (71 × 39 in.) 203.2 cm (180 × 100 cm)	15.7 in. 40 cm	54.9 in. 139 cm
9.3 to 19.8 feet 2.83 to 6.04 m	100 in. (87 × 47 in.) 254 cm (220 × 120 cm)	19.6 in. 50 cm	68.6 in. 174 cm
11.2 to 23.8 feet 3.41 to 7.25 m	120 in. (106 × 59 in.) 305 cm (270 × 150 cm)	24 in. 60 cm	82 in. 209 cm
14.0 to 29.8 feet 4.27 to 9.08 m	150 in. (130 × 75 in.) 381 cm (330 × 190 cm)	29 in. 75 cm	103 in. 262 cm
18.7 to 39.7 feet 5.70 to 12.11 m	200 in. (173 × 98 in.) 508 cm (440 × 249 cm)	39 in. 87 cm	137 in. 336 cm

4:3 aspect ratio

Projection distance	Diagonal image size (width × height)	Offset A	Offset B
3.3 to 7.2 feet 1.02 to 2.20 m	30 in. (24 × 18 in.) 76.2 cm (61 × 46 cm)	7.2 in. 18 cm	25.2 in. 64 cm
4.5 to 9.6 feet 1.37 to 2.94 m	40 in. (32 × 24 in.) 101.6 cm (81 × 61 cm)	9.6 in. 24 cm	33.6 in. 85 cm
6.8 to 14.5 feet 2.07 to 4.43 m	60 in. (47 × 35 in.) 152.4 cm (120 × 90 cm)	14.4 in. 37 cm	50.4 in. 128 cm
7.4 to 19.4 feet 2.27 to 5.91 m	80 in. (63 × 47 in.) 203.2 cm (160 × 120 cm)	19.2 in. 49 cm	67.2 in. 171 cm
11.4 to 24.3 feet 3.48 to 7.40 m	100 in. (79 × 59 in.) 254 cm (200 × 150 cm)	24 in. 61 cm	84 in. 213 cm

4:3 aspect ratio

Projection distance	Diagonal image size (width × height)	Offset A	Offset B
13.7 to 29.2 feet 4.18 to 8.89 m	120 in. (94 × 71 in.) 305 cm (240 × 180 cm)	29 in. 73 cm	101 in. 256 cm
17.2 to 36.5 feet 5.23 to 11.12 m	150 in. (118 × 91 in.) 381 cm (300 × 230 cm)	36 in. 91 cm	126 in. 320 cm
22.9 to 48.7 feet 6.99 to 14.83 m	200 in. (161 × 118 in.) 508 cm (410 × 300 cm)	48 in. 122 cm	168 in. 427 cm

To determine the exact image size when you know the projection distance (or the exact projection distance when you know the desired image size), you can use the Image Size Calculator. This program is available on the Epson website at epson.com/support (U.S.) or epson.ca/support (Canada).

Also keep these considerations in mind:

- Make sure there is plenty of space for ventilation around the projector. Air coming out of the ventilation slots can be quite hot. Do not place anything near the slots that can be damaged by heat.
- Make sure the projector is within 9.8 feet (3 m) of a grounded electrical outlet or extension cord.

Installing the Projector

To install the projector, you first need to determine the location, based on the size of your screen (maximum diagonal image size). Use the tables on page 14 as a guide to positioning the projector.

To suspend the projector from a ceiling, you will need the optional projector mount designed for the projector. See page 10 for ordering information. Follow the instructions included with the mount to install the projector.

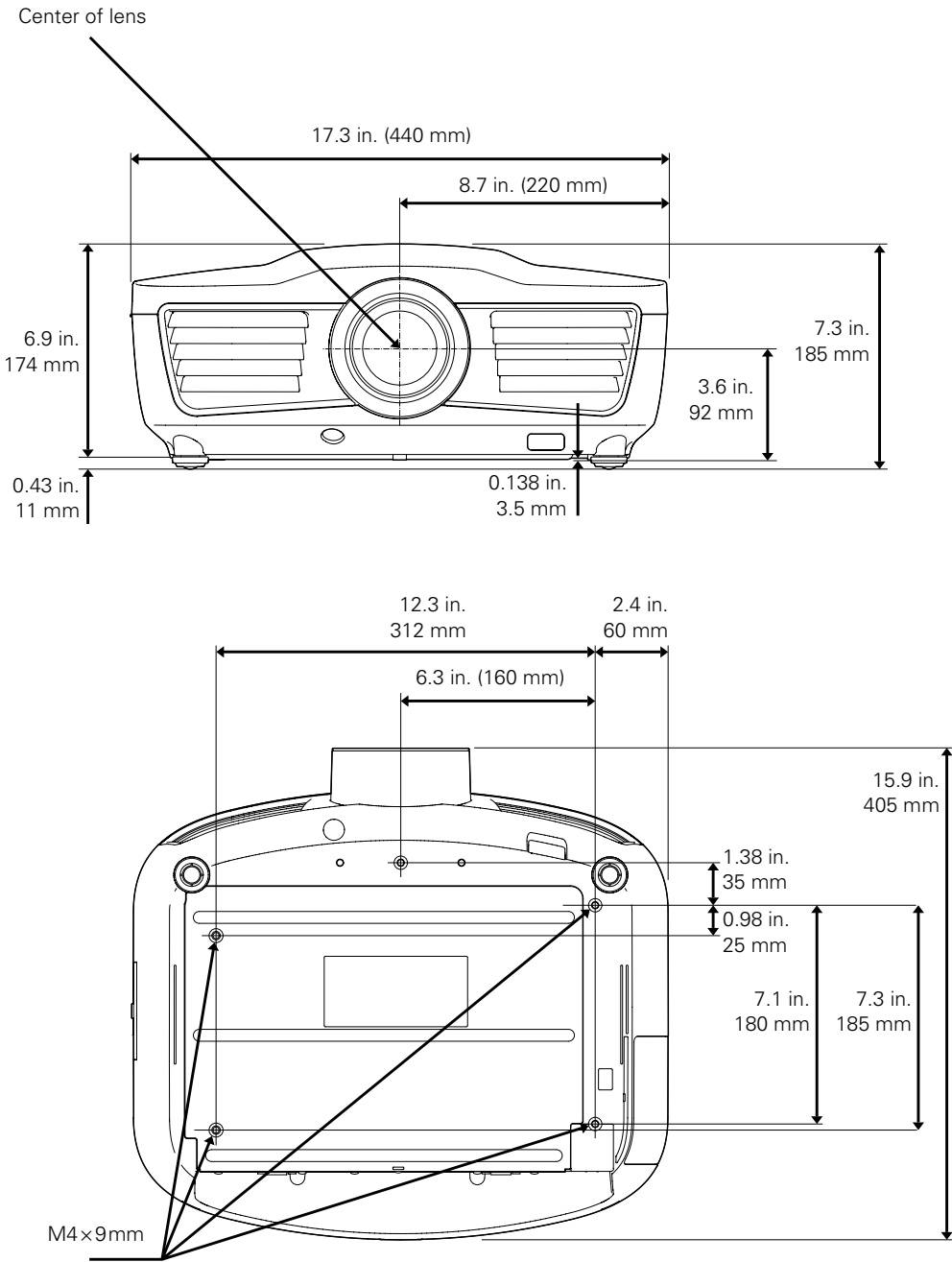
Warning: When installing or adjusting the ceiling mount, do not use adhesives to prevent the screws from loosening and do not use any type of oil or lubricant. These may cause the projector casing to crack and the projector may fall, causing serious injury and serious damage to the projector.

If you install the projector on the ceiling, you will need to invert the picture so that it appears right side up. Follow these steps:

1. Press the **Menu** button on the remote control.
2. Open the **Settings** menu, then select **Projection**.
3. Select **Front/Ceiling**.
4. Press the **Menu** button when done.

If you are planning to use an AV controller with the projector, refer to the table of ESC/VP21 command codes on page 74. In addition, the projector's **Trigger out** port can be used to lower a projection screen or operate an anamorphic lens (see page 45).

The following illustrations show the dimensions of the projector:



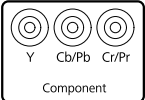
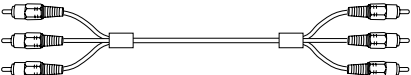
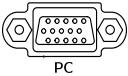


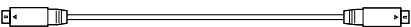

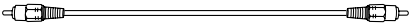


Connecting the Cables

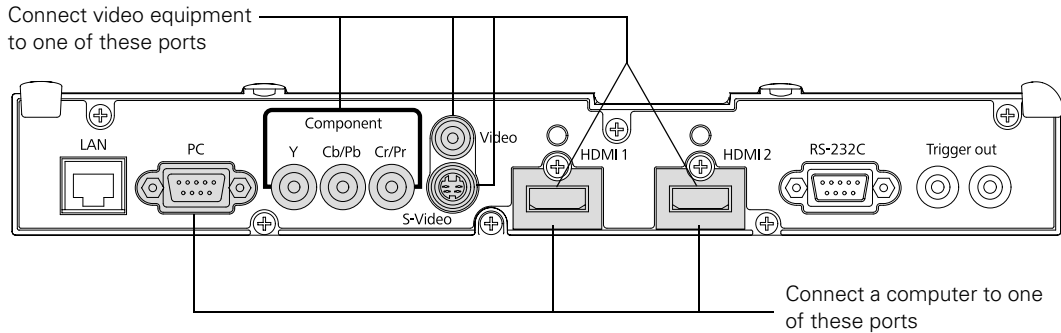
Connecting Video and Computer Equipment

You can connect the projector to many types of video equipment, such as a Blu-ray Disc™/DVD player, digital tuner, cable or satellite box, video game console, camcorder, or digital camera. You can also connect it to a desktop or laptop PC or Apple® Macintosh® system. For details on compatible video formats, see page 71.

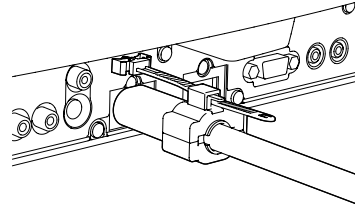
You can connect up to six pieces of video equipment at the same time, using any of the commercially available cables shown below:

Port name	Video equipment connection	Computer connection
HDMI 1/ HDMI 2 	Use an HDMI cable:  For a computer with a DVI port, you can also use a commercially available DVI-D to HDMI conversion cable.	
Component 	Use a component video cable (with RCA-style connectors):  Connect the cable to the three component video ports. Match corresponding colors between the cable and the ports.	—
PC 	—	Use a Mini D-sub, 15-pin monitor cable to connect to a computer RGB (monitor) port: 
S-Video 	Use an S-video cable: 	—
Video 	Use an RCA video cable: 	—

For best results, connect your video equipment to the HDMI port, if possible. If your equipment doesn't support HDMI, connect it to one of the following ports (highest quality listed first): **Component** (for component video), **S-Video**, or **Video** (for composite video).



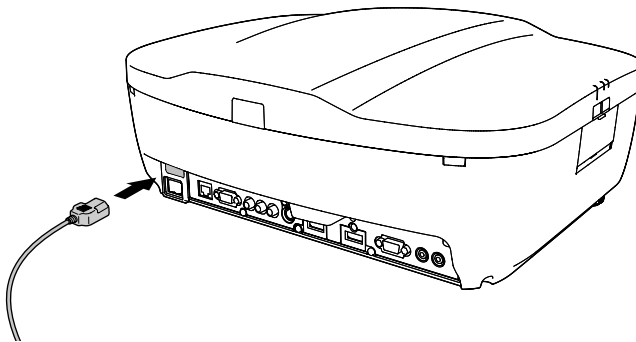
When you connect an HDMI cable to the projector, it is recommended that you fasten it as shown with one of the included cable clamps.



Making Other Connections

Connect the power cable and other cables described below, depending on how you plan to use the projector.

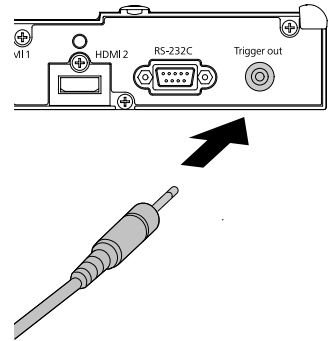
- Plug the power cable into the projector and a grounded electrical outlet.



- The **Trigger out** port(s) output a 12-volt DC signal when the projector is turned on. This lets a central control system monitor whether the projector is on or off, and can be used to raise or lower your projection screen automatically when the projector is in use. Depending on the setting you select (see page 45), it can also be used to operate an anamorphic lens.

Connect a 3.5-mm mini jack to the port, as shown.

- To use an AV controller with the projector, connect a 9-pin null modem serial cable to the **RS-232C** port. Refer to the table of ESC/VP21 command codes on page 74.




Installing Batteries in the Remote Control

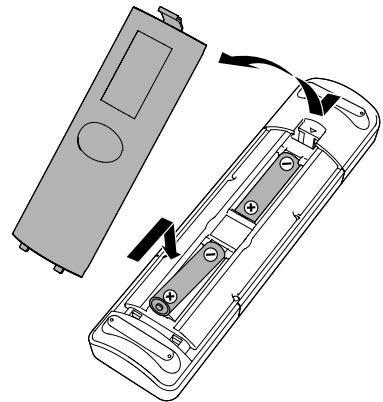
The remote control uses two AA manganese or alkaline batteries.

Warning: Keep batteries away from children. If a battery is swallowed, contact your doctor immediately.

1. Release the tab and lift open the cover.
2. Insert two new AA batteries as shown.
3. Insert the tab on the cover and press it down until it clicks into place.

Aim the remote control at the screen, or at the front or back of the projector. Make sure you are within 30 feet of the projector.

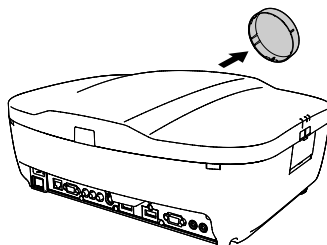
If you suspect the batteries are weak, press the  illumination button. If the buttons do not glow, replace the batteries.



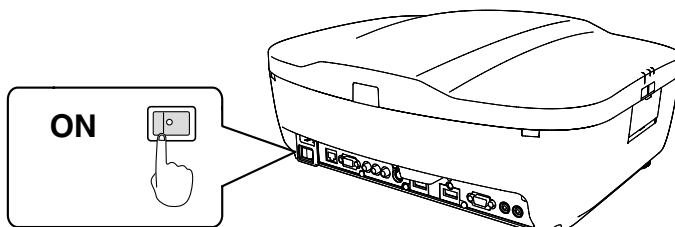
Turning the Projector On and Off


Turning On the Projector

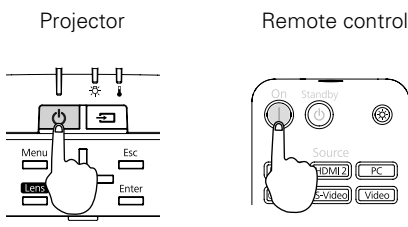
1. Remove the lens cap.
2. Turn on any connected equipment you plan to use.



3. Turn on the main power switch on the back of the projector.



4. Press the  power button on the projector or the On button on the remote control.





Note: To prevent children from turning on the projector, you can use the Child Lock feature. See page 29 for details.

If you'll be using the projector at an altitude above 4900 feet (1500 meters), turn on High Altitude Mode so the fan can properly cool the projector at the high altitude air pressure. See page 46 for details.


The projector takes about 30 seconds to warm up and display an image. If you don't see a picture, you may need to change the image source as described on page 22.

Turning Off the Projector

1. Turn off any equipment connected to the projector.
2. Press the  power button on the projector or the  **Standby** button on the remote control. When you see a confirmation message, press the button again to turn the projector off.

Caution: Turn off this product when not in use to prolong the life of the projector. Continuous 24-hour-a-day use may reduce the overall life of the product.

Note: You can disable the confirmation message if you only want to press the button once to turn off the projector (see page 43).

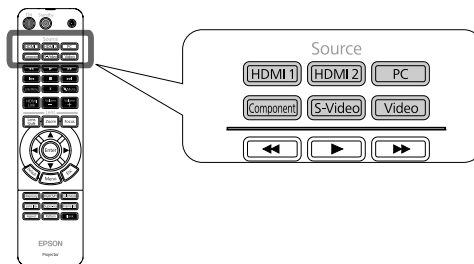
3. If you need to move the projector, wait for the  power light to stop flashing, then turn off the projector's main power switch on the back. You can now unplug the projector.



Caution: Never turn off the main power switch without first turning off the projector and letting it cool as described above, or you could damage it and reduce lamp life.

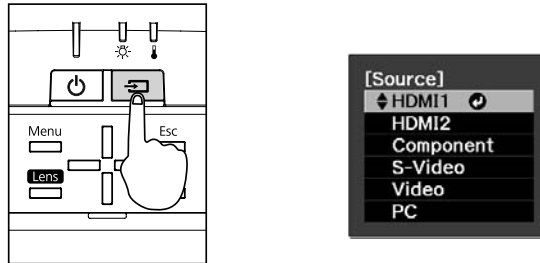
Selecting the Image Source

The source buttons on the projector and remote control let you switch between images from different pieces of equipment connected to the projector (such as a DVD player, cable or satellite box, or video game console).

Press the **Source** button on the remote control that corresponds to the port to which your video source is connected.



If you press the  source button on the projector, you see a list of available sources. Press the  source button to move through the list and select the desired source.

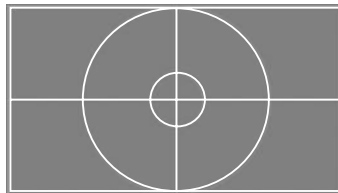


Note: If an image does not appear, see “Problem Solving” on page 61.





To temporarily turn off the image and darken the screen, press the **Blank** button on the remote control. Press the **Blank** button again to return to normal viewing.

Positioning the Image

You can display a test pattern to help adjust the image position by pressing the **Pattern** button on the remote control. Select **Display Position**, then press **Enter**. Press the **Esc** button to turn off the test pattern. You can also use the **Pattern** button to isolate colors when displaying color bars (see page 36).



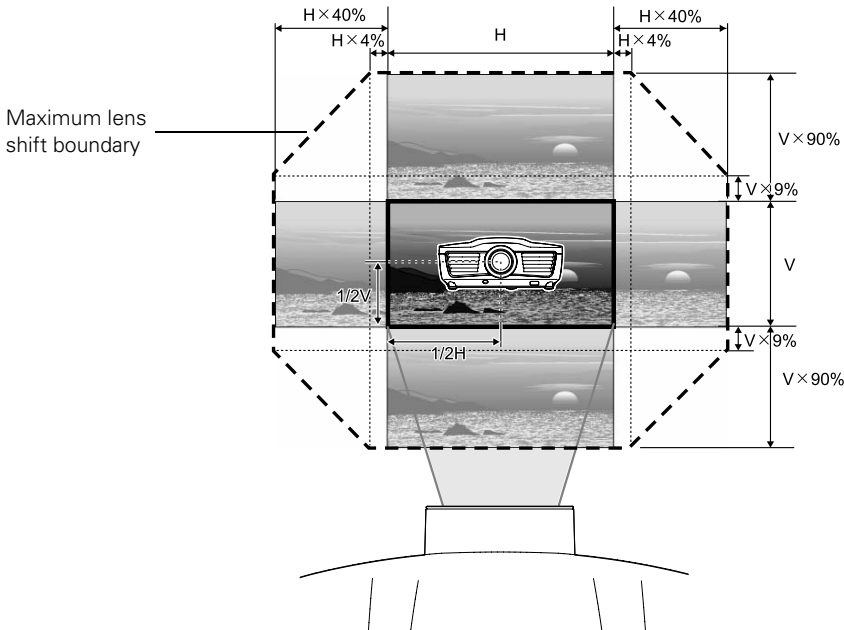
If the image is not centered on the screen, use the lens shift function, as described below, to adjust its position.

- If the image looks like  or , make sure the projector is not tilted up or down. Instead, keep the projector level, then use the lens shift to position the image on the screen.
- If the image looks like  or , the projector has been placed off to one side of the screen and angled toward it. Instead, face the projector straight ahead, then use the lens shift to center the image.

To use the lens shift, press the **Lens Shift** button on the remote control, then use the ◀▶ ▲ ▼ arrow buttons to adjust the image position. To return the lens to the center, press and hold any arrow button until the lens moves to the center and stops.

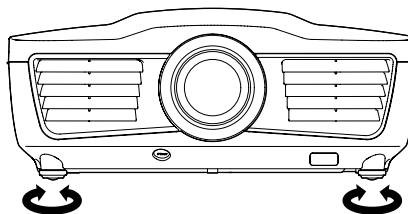
Caution: Do not try to move the lens by hand, or you may damage the projector. Always use the lens shift function to change the lens position.

The amount by which you can shift the image is expressed in terms of the horizontal (H) and vertical (V) image size, as shown below:



Note that the image cannot be moved to the maximum distance in both the vertical and horizontal directions at the same time. For example, when the image has been shifted horizontally by the full amount, it can be shifted vertically by only 9 percent of the height of the image.

If the image is centered on the screen but one side is taller than the other, adjust the front feet so that the projector is level.

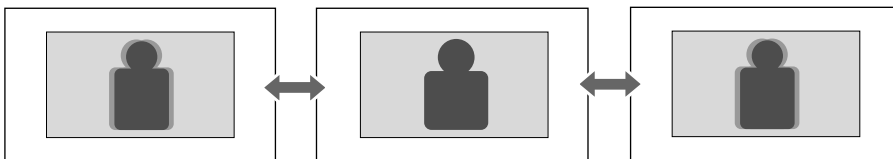


Making Basic Adjustments

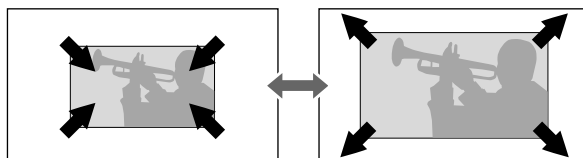
Follow the instructions in this chapter to make basic adjustments to the image shape, size, color, and quality. For further refinements, see “Making Detailed Adjustments” on page 31.

Focusing and Zooming

To focus the image, press the **Focus** button on the remote control, then use the ◀ and ▶ arrow buttons to adjust the picture.



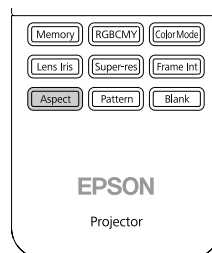
To adjust the image size, press the **Zoom** button on the remote control, then use the ◀ and ▶ arrow buttons to reduce or enlarge the picture.



Choosing the Aspect Ratio

In many cases, video signals are automatically resized to fit on your screen when **Auto** is selected as the Aspect setting. You may need to change the size of the image (or aspect ratio) for certain image types by pressing the **Aspect** button on the remote control.

Select one of these settings (some settings may not be available, depending on the input signal):



- **Normal** for HDTV (16:9 aspect ratio), computer images, or images recorded at a 4:3 aspect ratio.

HDTV (16:9) image using Normal setting



4:3 image using Normal setting



- **Full** for images recorded in squeeze mode (using horizontal compression). 4:3 images not recorded in squeeze mode are stretched to fit the screen.
- **Zoom** for images recorded in letterbox format. Fits the image to the screen.

Note: Depending on the image's aspect ratio, the top and bottom may be hidden from view. Use the **Zoom Size** option to adjust the image vertically. If subtitles aren't visible, use **Zoom Caption Pos.** to reposition the image. See page 43.

- **Wide** to expand a 4:3 image to 16:9 so it fills the whole screen. This stretches only the right and left sides of the image; the central part is unchanged.
- **Anamorphic Wide** to display images that have a 2.40:1 aspect ratio (such as CinemaScope®) when using a commercially available anamorphic lens (available from Epson—see page 10).

Note: If you use this setting without an anamorphic lens, the image fills the screen vertically but not at the correct aspect ratio. Make sure **Overscan** is set to **Off** (100%), or the image won't display correctly (see page 42). If your anamorphic lens has a motorized transport, you can operate it automatically with the **Trigger out** port (see page 45).

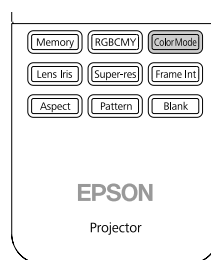
- **Horiz. Squeeze** to display images that have a 16:9 or 4:3 aspect ratio when you've equipped the projector with a fixed anamorphic lens.

Choosing the Color Mode

You can change the Color Mode to automatically adjust brightness, contrast, and color, letting you quickly optimize the projected image for various lighting environments. You can also select a different color mode for each input source—which is useful if you view different types of images from different sources. (For example, you might set the HDMI 1 source to **Living Room** if it's usually used for watching movies in the daytime with the blinds closed, and the PC source to **Dynamic** for playing video games with the blinds open.)

Select the image source you want to adjust, then press the **Color Mode** button on the remote control. Choose from these settings:

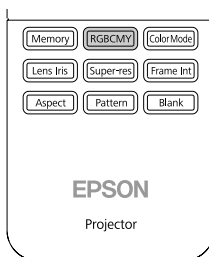
- **Dynamic** for projecting the brightest picture available.
- **Living Room** for watching television programs during the day.
- **THX** for projecting natural, accurate colors in a dimly lit room.
- **Cinema** for viewing movies in a dimly lit room.
- **x.v.Color** for the most natural color reproduction when viewing movies through HDMI.



The built-in Epson Cinema Filter automatically improves color reproduction in a darkened room; it is used when you select **Cinema** or **x.v.Color**.

Advanced Color Adjustments

To further customize the color and image quality, you can adjust the gamma and individual RGBCMY color tones. (Not available when **x.v.Color** is selected as the Color Mode.)



Note: You can fine-tune these and other color and image quality settings using the projector's menu system (see page 31). You can also save combinations of picture settings with the Memory feature for easy recall (see page 39). If you don't like the settings you have selected on a particular menu screen, you can press the Default button to restore the factory settings.

Adjusting the Gamma Setting

You can select from five gamma settings (2.0 to 2.4) or customize your own setting from your image or a displayed graph. Lower values will increase the contrast of dark areas, but tend to blur the bright areas. Higher values will darken the light areas. Gamma presets make minor adjustments to mid-tone values. The larger the gamma preset, the lower the midtone values. Changing these settings affects contrast which can be seen as a blur in bright areas.

1. Press the **Menu** button, then select **Image > Advanced > Gamma**.

You see the following displayed on the screen:

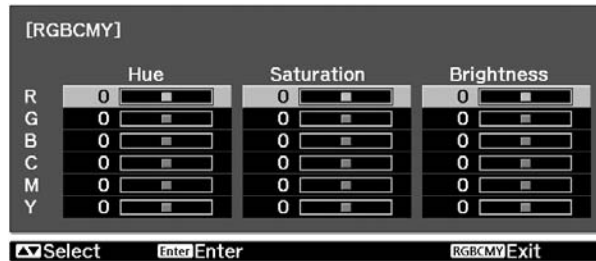


2. Do one of the following:
 - Select one of the numeric correction values using the **▲** or **▼** button on the remote control and press the **Enter** button. You see the setting reflected in the graph on the right. The horizontal axis represents the input signal level, and the vertical axis represents the output signal level. Press the **Gamma** button to exit.
 - Select **Customized**. Then continue with the next step.
3. Do one of the following:
 - Select **Adjust it from the image**. You see a gamma icon on the projected image. Use the arrow buttons to move the icon to the area of brightness you want to adjust, then press **Enter**. The custom gamma graph appears with the channel selected for adjustment. Press the **▲** or **▼** button to adjust and then press **Enter**.
 - Select **Adjust it from the graph**. When the gamma graph appears, use the **◀** or **▶** button to select the point on the graph that you want to adjust, and then use the **▲** or **▼** button to adjust the settings. Press **Enter** to save your setting and exit.

Adjusting RGBCMY

Use this feature to adjust the hue, saturation, and brightness for each of the red (R), green (G), blue (B), cyan (C), magenta (M), and yellow (Y) color components.

1. Press the **RGBCMY** button. You see the following displayed on the screen:



2. Use the **▲** or **▼** button on the remote control to select the color you want to adjust, and press the **Enter** button.
3. Select the **Hue**, **Saturation**, or **Brightness** for that color, and use the **◀** or **▶** button to make the adjustment.
4. Press **Esc** to adjust another color, or press **RGBCMY** to exit.

Note: You can also adjust the offset and gain using the RGB setting in the projector's menu system (see page 37).






Locking the Projector

The projector includes three lock settings to prevent the image from being accidentally changed once it's adjusted, and to keep children from turning on the projector without adult supervision.

To access the lock settings, follow these steps:

1. Press the **Menu** button on the remote control.
2. Use the menu navigation buttons to open the **Settings** menu, then open **Lock Setting**.

3. Choose from these options:

- **Lens Lock** disables the focus, zoom, and lens shift. If you try to use one of these functions, a  lock icon appears on the screen.
- **Child Lock** to disable the  power button on the projector's control panel unless it is pressed for about 3 seconds. (You can use the  power button to turn it off, however.) Since you can still use the remote control to turn on the projector, you may want to keep it away from children's reach.
- **Control Panel Lock** to disable all the buttons on the projector's control panel, except for the  power button. A  lock icon appears on the screen whenever you press a button with Control Panel Lock turned on. To cancel Control Panel Lock, press and hold the **Enter** button on the projector's control panel for at least 7 seconds.

4. Press **Menu** to exit the menu system.

If you turned on the Control Panel Lock, the projector buttons are now locked.

If you turned on the Child Lock, turn off the projector and let it cool down. The Child Lock takes effect after the cool-down period.

Caution: If the Direct Power On setting is turned on (see page 44), using the main power switch can cause the projector to start even though the Child Lock is in use.

Making Detailed Adjustments

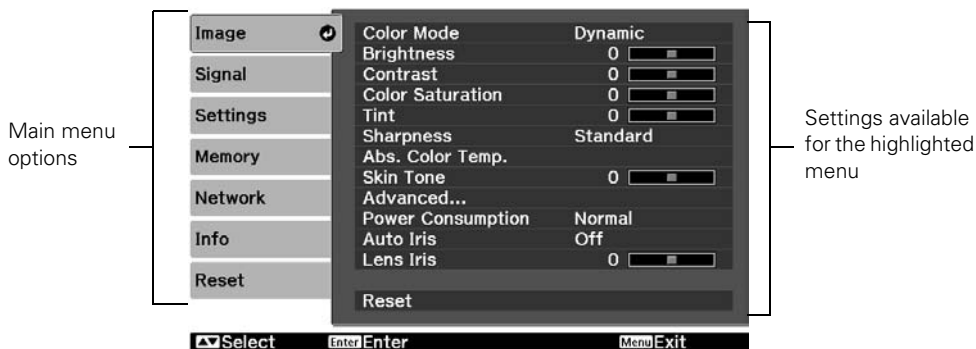
You can use the projector's on-screen menus to make detailed adjustments to the image quality—such as the brightness, contrast, sharpness, and color. You can also change the menu display, sleep mode settings, and other projector features.

Using the Menu System

You can access the menu system either from the remote control or the buttons on the projector's control panel. You can also change the menu language and control how the menus display (see page 32).

Note: If you press **Blank** on the remote control while a menu is being displayed, the menu screen disappears. This is useful for checking the effects of your image adjustments. Press **Blank** again to make the menu reappear.

To display the menu, press the **Menu** button on the projector or remote control. You see a display like this one:



Note: You may see different options, depending on your projector model and how your equipment is connected to it.

1. Press the ▲ or ▼ button to highlight a main menu option (Image, Signal, Settings, etc.), then press the Enter button to select it.
2. Press the ▲ or ▼ button to highlight a setting, then press the Enter button.

3. Press the ▲, ▼, ◀, or ▶ button to change settings as necessary. You may have to press the Enter button to confirm your choice.
4. When you're finished, press the Esc button to return to the previous menu or press the Menu button to exit the menu system.

Changing How the Menus Display

Use these options to control how the menus display.

■ Language

Settings > Language

Select from 21 languages to use in the menu system.

■ Menu Position

Settings > Display > Menu Position

Use the arrow buttons to choose a position on the screen for displaying the menu.

■ Menu Color

Settings > Display > Menu Color

Select a color scheme for displaying the menus.

Adjusting the Picture Quality

Before fine-tuning the image using these adjustments, make sure you have already selected the best Color Mode for your picture and viewing environment, as described on page 27. Then use the settings in this section to finish adjusting the picture to your liking. Note that some settings can only be used under certain conditions—for example, depending on the color mode you've selected.

Most image quality settings are saved independently for each input source (Video, S-Video, HDMI, Component, PC) and color mode. After you finish adjusting the settings for one input source, switch to the other input sources you'll be using and make any necessary adjustments.

Input Brightness Settings

If the signal from connected equipment is weak and images appear dark, you can adjust the Brightness and Contrast settings. You can adjust brightness and contrast for each image source and color mode.

The Brightness setting controls how much light is produced by the projector, and the Contrast setting adjusts the difference between the bright and dark areas of the projected image. The other settings in this section control how the projector interprets the light and dark areas of the picture.

■ **Brightness**

Image > Brightness

Adjust the brightness so it's suitable for your viewing conditions. For example, if you're projecting in a brightly lit room or onto an especially large screen, you may need to increase the brightness. Decrease the brightness for dark rooms or small screens.

■ **Contrast**

Image > Contrast

This setting adjusts the difference between bright and dark areas.

■ **Auto Iris**

Image > Auto Iris

When this setting is on, the light output is automatically adjusted according to the brightness of the image. Select either **Normal** or **High Speed** to indicate how quickly you would like the projector to respond to changes in the brightness of the image. The setting is stored separately for each image source and color mode.

■ **Lens Iris**

Image > Lens Iris

Lets you adjust the brightness of the image by controlling the amount of light that passes through the projection lens. You can also access this setting by pressing the **Lens Iris** button on the remote control.

■ Setup Level

Signal > Advanced > Setup Level

Note: This setting can be used only when an NTSC signal is being input through the Video or S-Video port, or when a video signal is being input through the Component video ports.

This setting adjusts the threshold at which dark areas of the image are rendered black (0 IRE). For compatibility with most DVD and video equipment sold in North America, leave this setting at 0%. Check your video equipment's specifications to be sure of the correct setting.

■ EPSON Super White

Signal > Advanced > EPSON Super White

Note: This setting can be used only when a signal is being input through the HDMI1 or HDMI2 port and the Color Mode is set to THX or Cinema (see page 27).

If bright parts of the image are washed out or overexposed (when the input signal contains values over 100 IRE), turn this setting on to compensate.

■ HDMI Video Range

Signal > Advanced > HDMI Video Range

Note: This setting can be used only when EPSON Super White is turned off and a signal is being input through the HDMI 1 or HDMI 2 port.

If your video equipment has an HDMI port and you've connected it to the projector using an HDMI cable, set the level of the projector to match that of the video equipment.

■ Power Consumption

Image > Power Consumption

This setting controls the light output from the projector. On **Normal**, the projector produces a brighter image and the lamp uses more power. To save power, extend the life of the lamp, and reduce fan noise, select **ECO**.

Sharpness and Picture Quality Settings

If the image looks fuzzy, or if it contains noise or flickering, you can use these settings to correct it.

■ Sharpness

Image > Sharpness

Use this function to make lines and edges appear more distinct in the image. This setting is stored separately for each image source and color mode setting. You can select **Standard** to adjust the sharpness of the entire image, or select **Advanced** to access the following submenu:



Note: The Advanced setting cannot be used with a signal input through the PC port.

Use **Thin Line Enhancement** to sharpen details such as hair and clothing, or **Thick Line Enhancement** to sharpen large contours and backgrounds. You can also enhance the sharpness of vertical and horizontal edges that appear in the image.

■ Progressive

Signal > Progressive

Converts interlaced to progressive signals. The projector uses 3D DigiScan™ HD Circuitry Processing for video-sourced images.

Leave the setting on **Auto** to automatically detect and convert movie, computer graphics, and animation. Select **Video** for watching video images such as videos captured with a video camera. Set to **Film** if flickering appears with the **Auto** setting.

Note: This setting can be used only when viewing composite video or S-video signals, or 480i or 576i, or 1080i signals input through the Component, HDMI 1, or HDMI 2 ports (see page 71).

■ Noise Reduction

Signal > Advanced > Noise Reduction

Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27) or with a signal input through the PC port.

This setting reduces flickering of analog images. You can select from 3 levels of noise reduction.

■ Mosquito NR

Signal > Advanced > Mosquito NR

Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27) or with a signal input through the PC port.

This setting reduces grainy noise that can appear around the edges of MPEG images. You can select from 3 levels.

■ Block NR

Signal > Advanced > Block NR

Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27) or with a signal input through the PC port.

This setting reduces block noise that can appear when projecting MPEG images that have been compressed at a low bit rate.

■ Frame Interpolation

Signal > Frame Interpolation

This setting compares the current and previous frames, then creates a frame between them to reduce fuzziness and produce clearer moving images. You can select from 3 levels of frame interpolation. You can also access this setting by pressing the **Frame Int** button on the remote control.

Color Settings

If the image colors don't look correct, you can adjust them using these settings. Use the first three settings described below to make the most visible changes. If you only need to make slight adjustments, you can fine-tune the picture with the remaining settings. Most color settings are stored separately for each image source and color mode.

Note: If you're using a commercially available color calibration DVD, you can display a color-bar test pattern and then filter colors in the image by pressing the **Pattern** button. Select one of the **Color Isolation** options for the color you want to filter (R/G/B). This lets you adjust color settings without holding a filter over your eyes while making adjustments. Press the **Esc** button when you're done.

■ Color Saturation

Image > Color Saturation

Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27) or with a signal input through the PC port.

Adjusts the color intensity of the image.

■ Tint

Image > Tint

Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27) or with a signal input through the PC port.

Shifts the color balance between magenta and green.

■ Abs. Color Temp.

Image > Abs. Color Temp.

Note: This setting cannot be used when the Color Mode is set to THX or x.v.Color (see page 27).

Shifts the color balance between red and blue, making the image appear warmer or cooler.

■ Skin Tone

Image > Skin Tone

Note: This setting cannot be used when the Color Mode is set to THX or x.v.Color (see page 27).

Makes fine adjustments to the tint and controls the amount of magenta or green in the image. Also useful for correcting black-and-white images, if they look tinted.

■ RGB

Image > Advanced > RGB

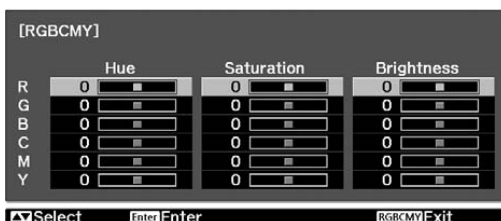


Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27).

Use the RGB settings to fine-tune the color of the image. You can adjust the offset and gain for each signal color (red, green, and blue). Use **Offset** to adjust darker shades and **Gain** for the lightest shades.

■ RGBCMY

Image > Advanced > RGBCMY



Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27).

Use the RGBCMY settings to adjust the hue, saturation, and brightness of the six color components (red, green, blue, cyan, magenta, yellow). After adjusting each color, press **Esc** to move to another menu option. You can also access this setting by pressing the RGBCMY button on the remote control. See page 29 for more information.

■ Gamma

Image > Advanced > Gamma

Note: This setting cannot be used when the Color Mode is set to x.v.Color (see page 27).

You can select from five gamma settings (2.0 to 2.4) or customize your own setting from your image or a displayed graph. Lower values will increase the contrast of dark areas, but tend to blur the bright areas. Higher values will darken the light areas.

■ Color Gamut

Image > Advanced > Color Gamut

Note: This setting can only be used when the Color Mode is set to THX (see page 27).

Lets you select the color gamut according to the equipment being used. Select from the following standards: HDTV, SMPTE-C, and EBU.

■ Super-resolution

Signal > Super-resolution

Can be used for upscaled video, to sharpen the image and enhance apparent detail. You can select from 3 levels of enhancement. Note that intentionally blurred parts of the image, such as out-of-focus backgrounds, may become sharper. You can also access this setting by pressing the **Super-res** button on the remote control.

Adjustments for Computer Images

In addition to the settings described previously, you can adjust the Tracking and Sync settings for analog RGB computer images. Normally, these settings are adjusted automatically by the projector. If you notice that the image is blurry or contains dark vertical bands, you may need to adjust the settings yourself.

■ Auto Setup

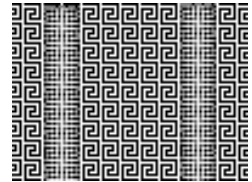
Signal > Auto Setup

Leave this setting on so that the projector automatically adjusts the tracking, sync, and position of the image.

■ Tracking

Signal > Tracking

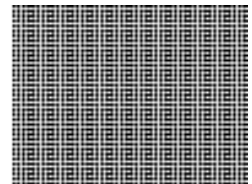
Adjust the tracking to eliminate vertical bands. It is easiest to adjust the tracking when the image contains a lot of fine detail (such as black text on a white background).



■ Sync.

Signal > Sync.

Adjust the synchronization to eliminate blurriness. For best results, make sure the tracking is properly adjusted first.



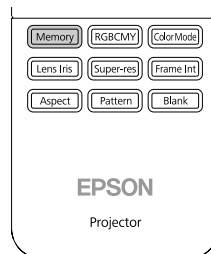
Selecting Memory Settings and Resetting the Projector

Your projector comes with 10 memory locations where you can save customized settings to obtain the best picture quality for each of your video inputs. In addition, you can save the current focus, zoom, and lens shift settings for reuse at a later time.

Selecting Memory Settings

You can easily recall the memory settings by using the memory button on the remote control.

1. Press the **Memory** button on the remote control.
2. Select **Load Memory** or **Load Lens Position**.
3. Use the arrow buttons to select the desired setting, then press the **Enter** button.




After a moment, the image appears on the screen using the retrieved settings. Certain settings may not be applied, depending on the input signal.

Note: Because of the mechanical nature of the lens, you may need to fine-tune the adjustment after loading a saved lens position.

Creating Memory Settings

Memory settings can be used to store most of the picture quality settings on page 34 and color settings on page 36. Before saving them to memory, adjust the settings to the desired levels.

1. Press the **Memory** button on the remote control.
2. Select **Save Memory** or **Save Lens Position**.
3. Select the memory name you want to use, then press the **Enter** button to save your settings.

Note: Saved settings are indicated by a green highlight  next to the memory name. If you select a name that is already in use, the existing settings will be erased and new ones saved in their place.

Renaming Memory Settings

You can rename memory settings so that they are easier for you to recognize.

1. Press the **Memory** button on the remote control.
2. Select **Rename Memory** or **Rename Lens Position**.
3. Select the memory name you want to change, then press the **Enter** button. The name selection screen is displayed.
4. Do one of the following:
 - To select a name from the displayed preset names, select the desired name and press the **Enter** button.

- To create your own name, select **Customized** and use the keyboard screen to enter the name. Use the arrow buttons to select a character, then press the **Enter** button. When you have selected all of the characters in your name, select **Finish** and press the **Enter** button.

Deleting Saved Memory Settings

You can clear all your memory settings at once.

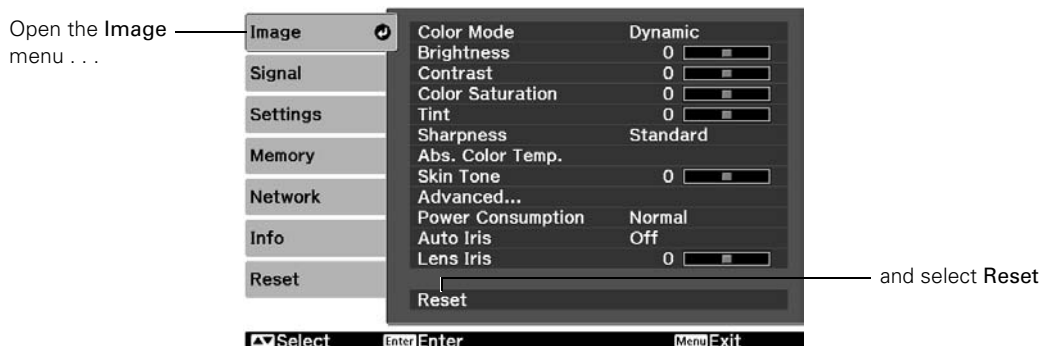
1. Press the **Menu** button on the remote control.
2. Open the **Reset** menu, then select **Reset Memory**.
3. Select **Yes**, then press the **Enter** button to delete the memory settings.

Note: You can delete memory settings one at a time with the **Erase Memory** setting under the **Memory** menu.

Resetting the Projector

If the image quality isn't what you expect, one or more settings may be adjusted improperly. If necessary, you can restore the projector to its factory-default (original) settings.

To restore the settings in a specific menu (such as the Image or Settings menu), open that menu, select **Reset**, and confirm as needed. The example below shows how to reset the Image menu settings:



You can also reset the lamp usage timer or restore all the projector settings to their original values. Follow these steps:

1. Press the **Menu** button on the remote control.
2. Open the **Reset** menu.

3. Do one of the following:
 - Select **Reset All** to return all projector settings to their original defaults (except Component, Memory, Language, Network, and Lamp).
 - Select **Reset Memory** to clear all memory settings.
 - Select **Reset Lens Position** to clear all lens position memory settings.
 - Select **Reset Lamp Hours** to clear the lamp usage timer and reset it to zero. You should reset the lamp timer only when you install a new projector lamp. See page 59 for more information.

Customizing Projector Features

Use the settings in this section to adjust the image size and position, suppress on-screen text, and select basic setup options.

Image Sizing

Before adjusting any of these settings, make sure you have already selected an appropriate aspect ratio for the type of picture you're viewing (see page 26).

■ Overscan

Signal > Advanced > Overscan

For component video formats, this setting lets you see the edges of the image that are not normally visible in the picture. If you see interference when you set **Overscan** to **Off**, try adjusting the **Position** as described below.

■ Position

Signal > Position

Note: This setting cannot be used with a signal input through the HDMI 1 or HDMI 2 port.

Use the arrow buttons to fine-tune the position of the image on the screen.

■ Aspect

Signal > Aspect

This setting lets you change the aspect ratio of your image, and works the same as pressing the **Aspect** button on the remote control. See page 26 for more information.

■ Zoom Size

Signal > Zoom Size

Lets you adjust the proportions of the image when the aspect ratio has been set to **Zoom**. Make sure **Overscan** is set to **Off** before using this function.

■ Zoom Caption Pos.

Signal > Zoom Caption Pos.

Lets you adjust the vertical position of the image so that subtitles are visible (available only if the aspect ratio has been set to **Zoom**). Make sure **Overscan** is set to **Off** before using this function.

Screen Options

■ Messages

Settings > Display > Messages

Turn this setting off if you want to prevent on-screen messages from appearing (such as the no-signal message, or the identifying text that appears when you switch between image sources or color modes).

■ Startup Screen

Settings > Display > Startup Screen

Turn this setting off if you want to prevent the startup screen from appearing while the projector is warming up.


■ Display Background

Settings > Display > Display Background

Changes the screen that's used when the projector is not receiving a signal or when you press the **Blank** button to temporarily stop projection.

■ Standby Confirmation

Settings > Display > Standby Confirmation

Sets whether a confirmation message is displayed when you press the  **Standby** button on the remote control to turn off the projector.

Other Setup Options

■ Projection

Settings > Projection

You can select different options for projecting the image: **Front**, **Front/Ceiling**, **Rear**, **Rear/Ceiling**.


■ Standby Mode (PowerLite Pro Cinema 61000 only)

Settings > Operation > Standby Mode

Select **Communication On** to monitor and control the projector over your network when the projector is in standby mode.

■ Direct Power On

Settings > Operation > Direct Power On

Sets projection to start when the main power switch is turned on, without pressing the  power button on the remote control or the projector.

Note: When Direct Power On is enabled, restoration of power after a power outage can cause the projector to turn on.

■ Video Signal

Settings > Input Signal > Video Signal

Leave this setting on **Auto** so the projector can automatically interpret the format, such as NTSC or PAL (for standard TV formats).

■ Component

Settings > Input Signal > Component

Change this setting to match the type of equipment connected to the Component port. For component video, select **Auto** to let the projector automatically interpret the signal; or select **YCbCr** or **YPbPr** to manually select your video equipment's signal.

■ HDMI1 EQ Setting HDMI2 EQ Setting

Settings > Input Signal > HDMI1 EQ Setting or HDMI2 EQ Setting

If you're using a long HDMI cable, you may have to select a higher setting to increase the projector's sensitivity to the incoming signal. You can select a separate setting for each of the projector's HDMI ports.

■ Trigger Out

Settings > Operation > Trigger Out


Select **Power** to have the **Trigger out** port output a 12-volt signal to lower your projection screen when the projector is running. Or select **Anamorphic Wide** to engage a motorized anamorphic lens (commercially available) when the **Anamorphic Wide** or **Horiz. Squeeze** aspect ratio is selected.

The PowerLite Pro Cinema 61000 has two settings, **Trigger Out 1** and **Trigger Out 2**, that let you use its two **Trigger Out** ports for independent functions.

Note: If you change this setting, the new setting will take effect the next time you turn the projector on.

■ Illumination

Settings > Operation > Illumination


Turn off this setting to deactivate the lights on the projector's  power button and power light. Use this setting if you find the lights distracting in a darkened room.

■ Sleep Mode

Settings > Operation > Sleep Mode


Turn off this setting if you don't want the projector to enter sleep mode. (Sleep mode shuts the projector off automatically when there is no video signal.)

Select **5min.**, **10min.**, or **30min.** as the length of time before shutoff; decreasing the time conserves power and extends the life of the lamp.

To turn the projector back on, press the  power button on the remote control or the projector.


■ Lens Lock

Settings > Lock Setting > Lens Lock

Disables the focus, zoom, and lens shift. If you try to use one of these functions, a  lock icon appears on the screen.


■ Child Lock

Settings > Lock Setting > Child Lock

Lets you lock the  power button on the projector's control panel to make it more difficult for a child to turn on the projector. See page 29 for more information.

■ Control Panel Lock

Settings > Lock Setting > Control Panel Lock

Lets you disable all the buttons on the projector's control panel (except for the  power button) to prevent the image from being accidentally changed once it is adjusted. See page 29 for more information.

■ High Altitude Mode

Settings > Operation > High Altitude Mode

Adjusts the speed of the fan so it can properly cool the projector at higher altitudes. Turn this setting on if you are using the projector at an altitude of 4900 feet (1500 meters) or higher.

Making Network Settings

You can connect the PowerLite Pro Cinema 61000 to your network and make network settings using the menu options below.

■ Network Information

Network > Network information

Lets you check the projector's status on your network. You can check the projector's network name and MAC address, whether the projector is set to use DHCP, and the IP address, subnet mask, and gateway address assigned to the projector.

■ Basic

Network > Basic

Select **Projector Name** to enter up to a 16-character name to help you identify the projector on your network.

Select **PJLink Password** to control access to the projector when using compatible PJLink software.

Select **Web Control Password** to control access to the projector when using a web browser (see page 51).

■ Wired LAN

Network > Wired LAN

Assigns a network address to your projector. Select **DHCP** and set it to **On** if your network assigns addresses automatically. Otherwise, select **Off** and enter the projector's IP address, subnet mask, and gateway address.

Note: You can enter a number from 0 to 255 in each field of the address. For the IP Address and Gateway Address, you cannot use 0.x.x.x, 127.x.x.x, or 224.0.0.0 through 255.255.255.255. For the Subnet Mask, do not use 0.x.x.x through 254.x.x.x, or 255.255.255.255.

■ Mail

Network > Mail

Turn on **Mail Notification** if you want to receive e-mail alerts about the status of the projector (see page 51).

Select **SMTP Server** to enter the IP address for your SMTP server.

Note: You can enter a number from 0 to 255 in each field of the address. You cannot use 0.x.x.x, 127.x.x.x, or 224.0.0.0 through 255.255.255.255.

Select **Port Number** to enter the port number for the SMTP server. The default value is 25. You can enter a number from 1 to 65535.

Select an **Address Setting** to enter up to three e-mail address where you want to be notified if a problem occurs. You can also select the types of problems about which you want to be notified.

■ AMX Device Discovery

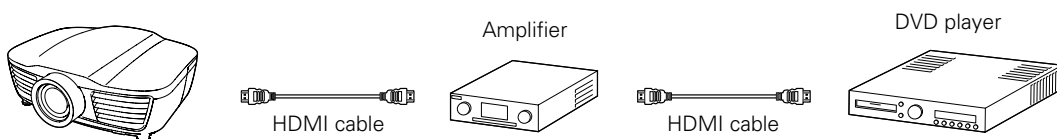
Network > AMX Device Discovery

When the projector is connected to a network, select **On** to allow the projector to be detected by AMX Device Discovery. Select **Off** if your network doesn't use an AMX controller.

Using HDMI Link

When you connect HDMI CEC-compatible devices to the projector with HDMI cables, you can control them using the HDMI Link buttons on the projector's remote control. This lets you use just one remote control to operate many commonly used features on all your devices.

In a typical configuration, your DVD player may be connected to the projector through an amplifier or home theater system. Even if the amplifier does not conform to the HDMI CEC standard, you can still use the projector's HDMI Link buttons to operate the DVD player as long as the DVD player conforms to the HDMI CEC standard.

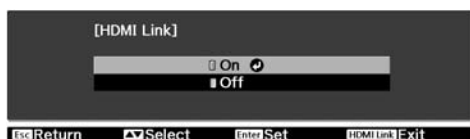


Note: Some HDMI CEC functions may not operate, depending on the connected product's design and compliance with the HDMI CEC standard.

Setting Up HDMI Link

To prepare your devices to work with the HDMI Link buttons, follow these steps:

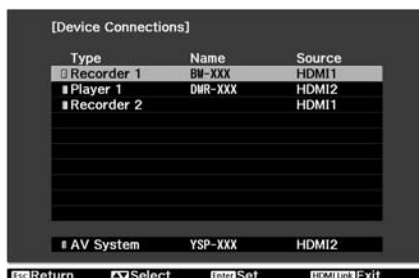
1. Press the HDMI Link button on the projector's remote control.
2. Select HDMI Link and set it to On.



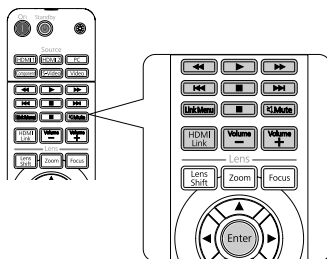
3. Set up your connected devices so their HDMI CEC-compatible functions are enabled. For details, refer to the manufacturer's documentation.

Using HDMI Link

1. Press the HDMI Link button on the projector's remote control.
2. Select **Device Connections**. You see this screen:



3. Use the ▲ and ▼ arrow buttons to select the device you want to operate, then press **Enter**. Devices are listed by type (Player, Recorder, AV System, or Tuner) and by name, if the model number is available.
4. Once the device is selected, use the HDMI Link buttons on the remote control to operate it. You can also use the power buttons, arrow buttons, **Enter**, and **Esc**. Commonly available functions include turning on the device when it's in standby mode, starting playback, adjusting the volume, and operating the device's link menu.



In addition, HDMI Link allows your projector and other devices to be turned on and off together:

- If you turn on a connected device, the projector automatically turns on and switches to the correct input source.
- If you turn on the projector, connected devices such as an amplifier and DVD player are turned on. If multiple video devices are connected, the one last used is turned on. When you turn off the projector, the connected devices are turned off.

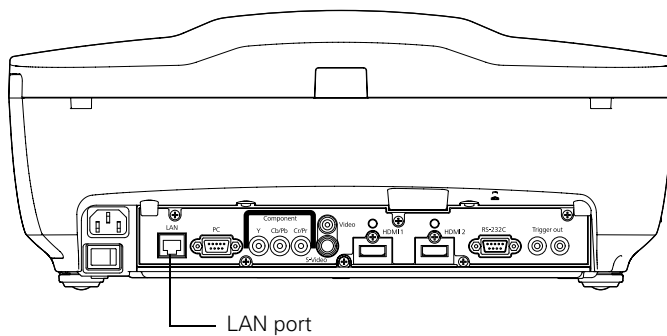
Note: For this to work, the CEC power link function of the connected devices must be enabled.

Using the Projector on a Network

When you connect the PowerLite Pro Cinema 61000 to your network, you can select projector settings and control projection from a web browser. This lets you access the projector remotely. You can also use e-mail alerts to notify you if a problem occurs with the projector.

Connecting the Projector to Your Network

1. Connect a Category 5 network cable to the projector's LAN port and to your network's switch or router.



2. Press the **Menu** button on the remote control.
3. Open the **Network** menu and select **Wired LAN**.
4. Turn on **DHCP** if your network assigns addresses automatically. Otherwise, select **Off** and enter the projector's IP address, subnet mask, and gateway address. (For details, see page 47.)

Tip: If you have multiple projectors connected to your network, you can enter a name for each projector to help you identify it on the network. In the **Network** menu, select **Basic**, then select **Projector Name**.

Monitoring the Projector with a Web Browser

Once you have connected the projector to your network, you can select projector settings and control projection using a compatible web browser.

Note: This feature supports Microsoft® Internet Explorer® 6.0 and later, and Safari® on Mac OS® X 10.2.8 and later. You must be able to connect through your network without using a proxy server. This feature does not let you access all projector settings and functions.

1. Make sure the projector is turned on.

Note: If the projector is turned off, you can still access it if you've set **Standby Mode** to **Communication On** (see page 44).

2. Start your web browser on a computer connected to the network.
3. Type the projector's IP address in the browser's address box and press **Enter**. You see the web control screen.
4. If necessary, enter the Web Control password (see page 46).
5. To select projector menu settings, select the name of the menu and follow the on-screen instructions to select settings.
6. To control projection, select the **Web Remote** option. Select the icon corresponding to the item you want to control.

Setting Up E-mail Alerts

Once you have connected the projector to your network, you can set up the projector to send you an e-mail alert if there is a problem with the projector.

1. Press the **Menu** button on the remote control.
2. Open the **Network** menu and select **Mail**.
3. Turn on **Mail Notification**.
4. Enter the IP address for your **SMTP Server**.

Note: You can enter a number from 0 to 255 in each field of the address. You cannot use 0.x.x.x, 127.x.x.x, or 224.0.0.0 through 255.255.255.255.

5. Enter the SMTP server **Port Number**, from 1 to 65535 (default is 25).

6. Choose an **Address** field, enter the e-mail address, and select the alerts you want to receive. You can enter up to three e-mail addresses.

Receiving E-mail Alerts

When a problem occurs, you will receive an e-mail with the following information:

- EPSON Projector on the subject line
- The name of the projector experiencing the problem
- The IP address of the affected projector
- Detailed information about the problem

If + appears at the start of the message, a problem has occurred. If – appears, the problem has been resolved.

Note: You can receive e-mail alerts when the projector is turned off if you've set **Standby Mode** to **Communication On** (see page 44). If a critical problem causes the projector to shut down, you may not receive an alert.

Maintenance

Your projector needs little maintenance. All you need to do on a regular basis is keep the lens clean. You also may need to clean the air filter to prevent overheating.

Warning: Before you clean any part of the projector, turn it off and unplug the power cord. Never open any cover on the projector, except the lamp and filter covers. Dangerous electrical voltages in the projector can injure you severely. Do not try to service this product yourself, except as specifically explained in this *User's Guide*.

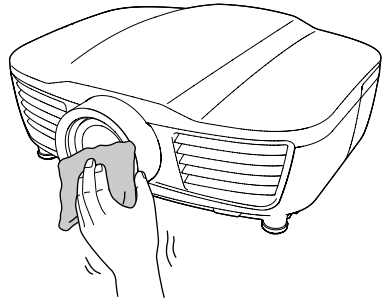
The only parts you should replace are the air filter and the lamp. If another part needs replacing, contact your dealer or a qualified servicer.

Cleaning the Lens

Clean the lens whenever you notice dirt or dust on the surface.

- Use a blower brush that is designed for camera equipment to remove dust from the lens.
- To remove dirt or smears, use a lens cloth or tissue. If necessary, moisten the cloth with lens cleaner and gently wipe the lens surface.

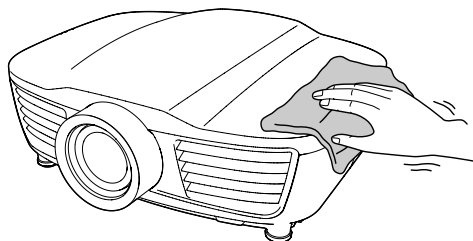
Caution: Never rub the lens with abrasive materials. Use only lens cleaning fluids that are designed for cleaning optics.



Cleaning the Projector Case

Before you clean the case, turn off the projector and unplug the power cord.

- To remove dirt or dust, wipe the case with a soft, dry, lint-free cloth.
- To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent. Then wipe the case and dry it with a dry cloth.

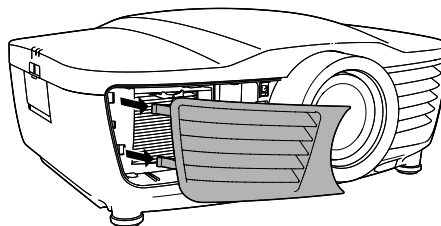
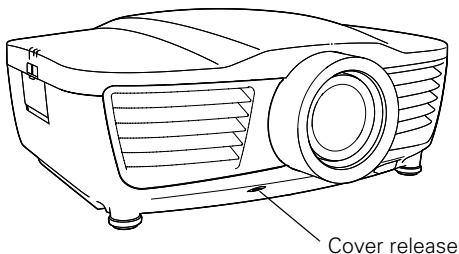


Caution: Never use wax, alcohol, benzene, thinner, or other chemical detergents. These can damage the case.

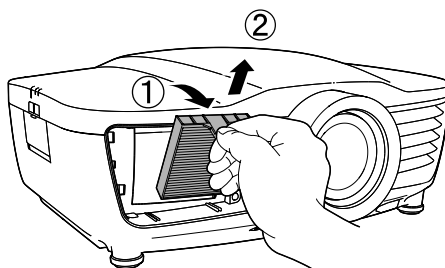
Cleaning and Replacing the Air Filter

Your projector includes an air filter to ensure the best performance. If dust collects on the air filter, clean it as described below. Dust clogs prevent proper ventilation and cause overheating and damage to the projector.

1. If the projector is on, press the ⏻ power button on the projector or the ⏻ Standby button on the remote control. Wait for the projector to cool and the ⏻ power light to stop flashing.
2. Turn off the main power switch on the back of the projector.
3. Unplug the power cord and disconnect any cables.
4. Press the air filter cover release and then remove the cover.



5. Grasp the tab on the air filter and remove it as shown.

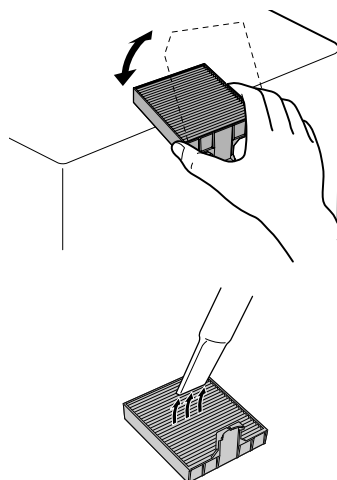


6. Gently tap both sides of the air filter against a hard surface four or five times to remove loose dust from the air filter.

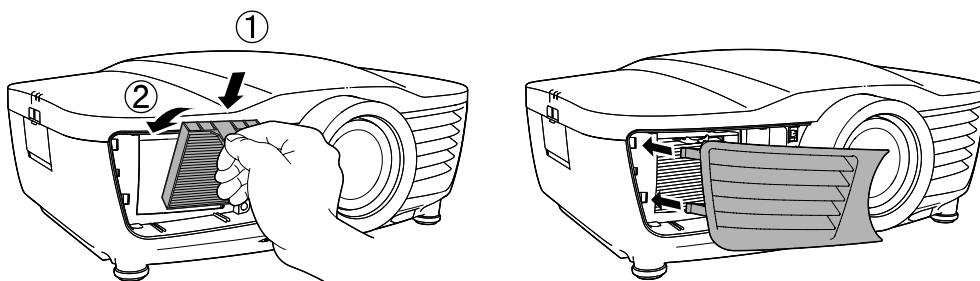
Note: Do not tap the filter too hard. This can cause it to bend or break.

7. Use a small vacuum cleaner that is designed for computers and other office equipment to remove any remaining dust from the surface of the filter. If you don't have one, gently clean the filter using a very soft brush (such as a clean artist's paintbrush).

If the dirt is difficult to remove or the filter is broken, replace it. You can purchase air filter part number V13H134A28 from an authorized Epson reseller. To find the nearest reseller, please call 800-GO-EPSON (800-463-7766). To purchase online, visit www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).



8. Insert the air filter as shown.



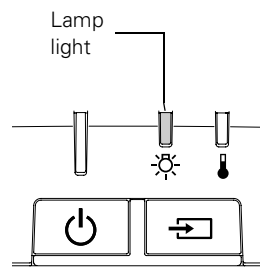
9. Reattach the air filter cover by inserting the tabs as shown and pressing the cover against the projector until it clicks into place.

Replacing the Lamp

The projection lamp lasts for up to 5000 hours. You can use the Info menu to check how long it's been in use (see page 59). It's time to replace the lamp when:

- The projected image gets darker or starts to deteriorate.
- The projector's lamp light flashes orange at half-second intervals.
- The message **Replace the lamp** appears on the screen when you start projecting.

Note: Lamp life results will vary depending on mode selected, environmental conditions, and usage.



Turn off this product when not in use to prolong the life of the projector.




You can purchase lamp part number V13H010L66 from an authorized Epson reseller. To find the nearest reseller, please call 800-GO-EPSON (800-463-7766). To purchase online, visit www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

Be sure to read the “Important Safety Information” on page 75 before replacing the lamp.

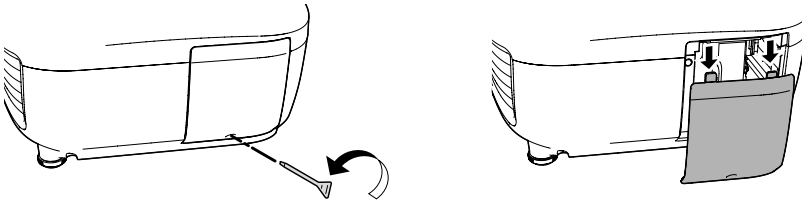
Warning: Let the lamp cool fully (about 1 hour) before replacing it. In the unlikely event that the lamp has broken, small glass fragments may be present and should be removed carefully to avoid injury.

Caution: Never touch the glass portion of the lamp with your bare hands; the invisible residue left by the oil on your hands may shorten the lamp life. Use a cloth or glove to handle the new lamp.

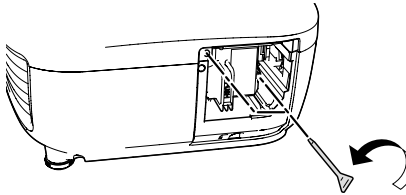
Follow these steps to replace the lamp:

1. If the projector is on, press the  power button on the projector or the  Standby button on the remote control. Wait for the projector to cool and the  power light to stop flashing.
2. Turn off the main power switch on the back of the projector.
3. Unplug the power cord and disconnect any cables.
4. Wait about an hour to make sure the lamp is no longer hot.

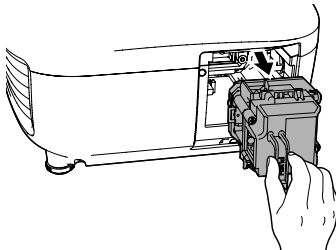
5. Use the screwdriver that came with the lamp (or a similar tool) to loosen the screw on the lamp cover. Then remove the cover as shown.



6. Loosen the two screws securing the lamp (they don't come all the way out).



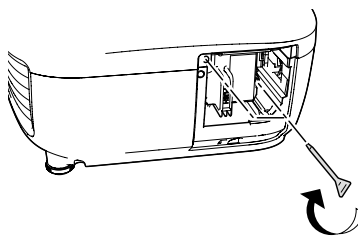
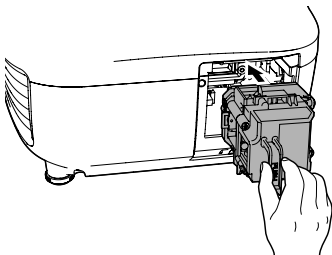
7. Grasp the lamp as shown and pull it straight out.



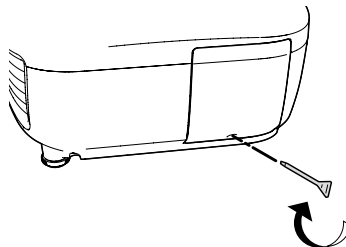
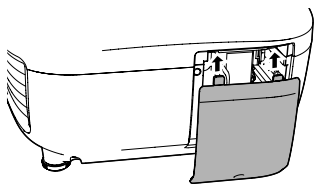
Warning: (Hg) The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.

8. Gently insert the new lamp and tighten its screws.

Caution: Don't touch the glass portion of the lamp assembly. Touching the glass could result in premature lamp failure.




9. Replace the lamp cover and tighten the screw. (The projector won't work if the lamp cover is open or loose.)



10. Reset the lamp usage timer, as described on page 59.

Resetting the Lamp Usage Timer

After replacing the lamp, plug the projector back in and turn on the main power switch on the back. Press the  power button on the projector or the **On** button on the remote control. Then follow these steps to reset the lamp usage timer:

1. Press the **Menu** button on the projector or remote control.
2. Use the menu navigation buttons to open the **Reset** menu, then select **Reset Lamp Hours**.
3. When you see a confirmation prompt, highlight **Yes** and press the **Enter** button.
4. When you're finished, press the **Menu** button to exit.

The lamp usage timer shows 0H until you've used the lamp for at least 10 hours.

Checking the Projector Status

You can use the Info menu to view information about the current display settings and how long the projection lamp has been in use. To access the Info menu:

1. Press the **Menu** button on the projector or remote control.
2. Use the menu navigation buttons to open the **Info** menu. The following information appears:

- | | |
|----------------|------------------------------|
| ■ Lamp Hours | ■ Sync Info |
| ■ Source | ■ Video Signal |
| ■ Input Signal | ■ Deep Color (color depth) |
| ■ Resolution | ■ Status (error information) |
| ■ Scan Mode | ■ Serial Number |
| ■ Refresh Rate | |

Note: The information displayed depends on the currently selected image source. The Lamp Hours shows 0H until you've used the lamp for at least 10 hours.

The resolution indicates the total number of scan lines in the source signal. The number of visible scan lines depends on the signal format standard and selected display settings.

Storing the Projector

If you need to store the projector for an extended time, do the following:

- Make sure the temperature of the storage area is within 14 to 140 °F (–10 to 60 °C).
- Attach the lens cover and retract the feet.
- Remove the batteries from the remote control.
- Pack the projector in its original packaging or equivalent.

Transporting the Projector

Note: Epson shall not be liable for any damages incurred during transportation.

The projector contains many glass and precision parts. When shipping the projector for repairs, use the original packaging material if possible. If you do not have the original packaging, use equivalent materials. Do not use materials that can become lodged in the projector vents. Be sure the carrier is capable of transporting fragile equipment and is aware that the projector is fragile.

Before transporting the projector, make sure you center the lens using the lens shift function (see page 23).

Caution: Transporting the projector with the lens off-center may damage the lens shift mechanism. Do not try to move the lens by hand, or you may damage the projector. Always use the lens shift function to change the lens position.

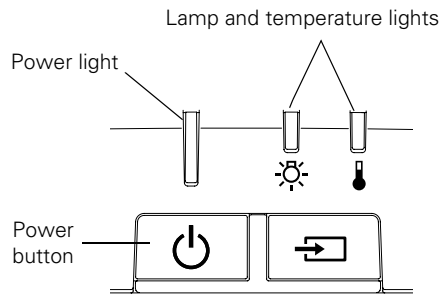
Problem Solving

This section explains how to interpret the projector's status lights, solve problems with the picture and remote control, and contact technical support.






What To Do When the Lights Come On or Flash

The lights on the projector indicate the projector's status and let you know when a problem occurs.



If the projector isn't working correctly, first turn it off, let it cool down, and unplug the power cord. Then plug the power cord back in and turn on the projector. If this doesn't solve the problem, check the projector's status lights.















Lights indicating normal operation

Light state	Cause and solution
All lights are off	The projector is turned off or in standby mode. You can unplug the projector or turn it on. Note: If the  power button and power light don't light up, they may have been turned off using the Illumination setting (see page 45).
 Power light flashes 	The projector is warming up. Wait for the picture to appear.
 Power light is on 	Projection is in progress.


Lights indicating normal operation

Light state	Cause and solution
 Power light flashes 	<p>The projector is cooling down. Wait until the light stops flashing and remains on. Then you can unplug the projector or turn it back on.</p> <p>If the power button is also flashing (PowerLite Pro Cinema 61000 only), the projector will go into network monitoring after cool-down is complete.</p>

Lights indicating a problem



Light state	Cause and solution
All lights are off	The projector is not receiving power. Make sure the main power switch on the back of the projector is turned on and the power cord is connected securely at both ends.
  The temperature light is flashing orange and the power button is flashing 	<p>High-speed cooling is in progress. If the temperature rises further, projection will stop automatically. Make sure there is plenty of space around the projector for ventilation. Clean or replace the air filter if necessary (see page 54).</p> <p>If you are using the projector at an altitude above 4900 feet (1500 meters), turn on High Altitude Mode so the fan can cool the projector properly (see page 46).</p>
  The temperature light is red	<p>The projector is too hot, which turns off the lamp automatically. Let the projector cool for five minutes, then turn it back on. Make sure there is plenty of space around the projector for ventilation. Also, clean or replace the filter if necessary (see page 54).</p> <p>If you are using the projector at an altitude above 4900 feet (1500 meters), turn on High Altitude Mode so the fan can cool the projector properly (see page 46).</p>
  The lamp light and power button are flashing 	The lamp needs to be replaced soon (see page 56). Make sure you have a spare lamp handy. If you just replaced the lamp, you may need to reset the lamp usage timer (see page 59).
  The lamp light flashes red	The lamp needs to be replaced. If you just replaced the lamp, make sure the lamp and its cover are securely installed (see page 56).
  Both warning lights are flashing red	There is a problem with the auto iris or cinema filter. Turn off the power switch on the back of the projector, and unplug it from the electrical outlet. Then contact Epson for assistance (see page 67).

Lights indicating a problem




Light state	Cause and solution
 The temperature light flashes red	There is a fan or sensor problem. Turn off the power switch on the back of the projector, and unplug it from the electrical outlet. Then contact Epson for assistance (see page 67).

Solving Picture Problems

You cannot turn on the projector.

- Make sure the power cord is connected and the main power switch in back of the projector is turned on. Then press the  power button on the projector or the **On** button on the remote control.
- If you've set the **Child Lock**, you have to press the  power button for 3 seconds to turn on the projector, or use the remote control (see page 29).

No picture appears on the screen or you see the No Signal message displayed.

- Press one of the **Source** buttons on the remote control, or press the  source button on the projector, to select the correct input source. Allow a few seconds for the projector to sync up after pressing the button.
- Press the **Blank** button on the remote control to make sure the picture hasn't been turned off temporarily.
- Check that the  power light is on and not flashing, and the lens cover is off.
- The projector may be in standby (or sleep) mode. If necessary, press the  power button on the projector or the **On** button on the remote control.
- Make sure your video equipment is turned on.
- Make sure your cable(s) are connected correctly (see page 18).


Only part of the picture is displayed, or the picture is distorted.


- Press the **Aspect** button to select a different aspect ratio (see page 26).
- If the **Aspect** is set to **Zoom**, you may need to use the **Zoom Size** and **Zoom Caption Pos.** options to see the top or bottom section of the screen so that subtitles are visible (see page 43).
- Check the **Overscan** to make sure it's adjusted correctly (see page 42).

- Use the **Position** setting to reposition the image on the screen (see page 42).
- If you've connected a computer and you see only half the image, make sure the computer's Dual Display setting is turned off. If part of the image is cut off, reset the projector settings (see page 41).

You're using a computer and no picture appears on the screen.

If you're using a Windows® laptop:

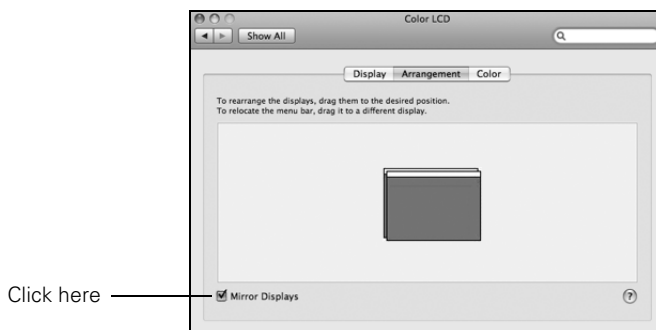
- Press the function key that lets you display on an external monitor. It's often labeled with an icon such as , but it may also be labeled **CRT/LCD**. You may have to hold down the **Fn** key while pressing it. Check your laptop's manual or online help.

On most systems, the  key lets you toggle between the LCD screen and the projector, or display on both at the same time. Allow a few seconds for the projector to sync up after pressing it.

- If the function key doesn't let you display simultaneously on both screens, you might need to use the Display utility in the Windows Control Panel to make sure that both the LCD screen and external monitor port are enabled. From the Windows Control Panel, open the **Display** utility. In the Display Properties dialog box, click the **Settings** tab, then click **Advanced**. The method for adjusting the setting varies from computer to computer; you may need to click a **Monitor** tab, then make sure the external Monitor port is set as your primary display or enabled. See your computer manual or online help for details.

If you're using Mac OS X:





1. Select **System Preferences** from the Apple menu and click **Displays**.
2. Click **Detect Displays**, if necessary.
3. To display the entire desktop on both your projector screen and LCD screen, click the **Arrangement** or **Arrange** tab. (If you don't see this tab, make sure it isn't hidden by another window.)
4. Click **Mirror Displays** in the lower corner of the screen. One of the monitor icons automatically moves on top of the other.



The picture is upside-down or reversed.

Change the **Projection** setting in the Settings menu (see page 44).

The picture isn't rectangular.

- If the image looks like  or , the projector has been placed off to one side of the screen and angled toward it. Face the projector straight ahead (instead of at the center of the screen), then use the lens shift function to center the image (see page 23).
- If the image looks like  or , make sure the projector is not tilted up or down.

The picture contains static or noise.

- Make sure the **Input Signal** is set correctly for your connected video equipment (see page 44).
- If you're viewing still images and you notice flickering or horizontal lines, turn on the **Progressive** setting (see page 35).
- Make sure your cables are securely connected at both ends.
- If you're using an extension cable, you may pick up interference if the cable is not adequately shielded. You may need to use a signal amplifier for longer cables, or turn on the **HDMI EQ** setting (see page 44).
- If you're displaying the same image on your computer and projector screen, try turning off your laptop's LCD display (see page 64).

The picture is blurry.

- Make sure the **Input Signal** is set correctly for your video equipment (see page 44).
- There may be dirt on the lens. Clean the lens as described on page 53.
- Adjust the focus (see page 25).

- Make sure the lens is not fogged by condensation. If you've just moved the projector from a cold environment, wait a couple of minutes before using it.
- Adjust the **Sharpness** setting (see page 35) or turn on **Super-resolution** (see page 38).
- If you're projecting from a computer, you may need to adjust the **Tracking and Sync** settings (see page 39).

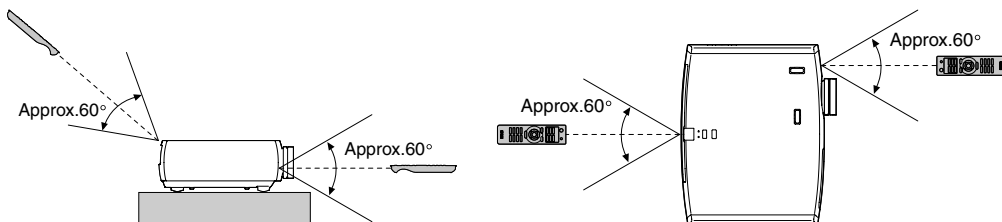
The colors on the screen don't look right.


- Make sure the **Input Signal** is set correctly for your connected video equipment (see page 44).
- Press the **Color Mode** button on the remote control to select a different color mode (see page 27).
- Check the brightness and contrast settings (see page 33).
- Fine-tune the colors with the settings listed on page 36.
- If the picture looks dark, check the **Lens Iris** setting (see page 33), as well as the **Brightness** and **Contrast**. You may also need to replace the lamp. Check the lamp usage timer to see how long the lamp has been in use (see page 59). Replace the lamp if it's close to the end of its service life (see page 56).

Solving Remote Control Problems

The projector doesn't respond to remote control commands.

- Make sure you're within about 30 feet of the projector, and the remote control is aimed at the projector's front or back sensor within the ranges shown below.



- You may need to replace the remote control batteries (see page 20). Press the  illumination button and check if the buttons glow. If they don't, replace the batteries.

- Dim the room lights and turn off any fluorescent lights. Make sure the projector is not in direct sunlight.
- Turn off nearby equipment that emits infrared energy, such as a radiant room heater.
- Make sure there are no objects between the remote control and the IR receiver.

Solving Other Problems

You cannot operate a connected device using HDMI Link.

- Make sure the device conforms to the HDMI CEC standard. Make sure you've enable its HDMI CEC-compatible features.
- Make sure you're using HDMI cables to connect the equipment you want to operate to the projector.
- If the device was recently connected or the connections were changed, restart the device. It may be necessary to reset its CEC functions.

You cannot monitor or control the projector over your network (PowerLite Pro Cinema 61000 only).

- Check the network cable and network settings.
- To monitor or control the projector when it's turned off, or to receive e-mail alerts, make sure you've set **Standby Mode** to **Communication On** (see page 44).
- Make sure the electrical outlet operates and has not been turned off by a switch or circuit breaker.

Where to Get Help

Internet Support

Epson provides technical assistance 24 hours a day at epson.com/support (U.S.) or epson.ca/support (Canada). Here you can access troubleshooting information, download product documentation, and receive technical advice through e-mail.

Speak to a Support Representative

To use the Epson PrivateLine Support service, call (800) 637-7661 and enter the PIN on the Epson PrivateLine Support card that came with your projector. This is the fastest way of speaking to a live representative, and it's free. This service is available 6 AM to 6 PM, Pacific Time, Monday through Friday, for the duration of your warranty period.

You may also speak with a projector support specialist by dialing one of these numbers:

- U.S.: (562) 276-4394, 6 AM to 6 PM, Pacific Time, Monday through Friday
- Canada: (905) 709-3839, 6 AM to 6 PM, Pacific Time, Monday through Friday

Days and hours of support are subject to change without notice. Toll or long distance charges may apply.

Before you call, please have the following information ready:

- Product name (PowerLite Pro Cinema 31000 or Pro Cinema 61000)
- Product serial number (located on the bottom of the projector)
- Computer configuration, if you're connected to a computer
- Description of the problem

Purchase Supplies and Accessories

You can purchase screens, carrying cases, or other accessories from an authorized Epson reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). To purchase online, visit www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

Specifications

General

Type of display	Poly-silicon TFT active matrix
Size of LCD panels	0.74 inch (18 mm) wide
Lens	F=2.5 to 3.7
Resolution (native format)	1920 × 1080 pixels, 1080p
Brightness	White light output 1200 lumens (ISO 21118 standard) Color light output 1200 lumens (Power Consumption mode: Normal)
Dynamic contrast ratio	500000:1 (Pro Cinema 31000) 1000000:1 (Pro Cinema 61000)
Image size	30 to 300 inches
Projection distance	2.7 to 59.7 feet (0.83 to 18.19 m)
Zoom ratio	1 to 2.1
Aspect ratio	16:9
Fan noise level	21 dB (Power Consumption mode: ECO)

Lamp

Note: Lamp life will vary depending on mode selected, environmental conditions, and usage. Brightness decreases over time.

Turn off this product when not in use to prolong the life of the projector.

Type	UHE (Ultra High Efficiency), E-TORL
Power consumption	200 W
Lamp life	4000 to 5000 hours (depending on selected Power Consumption setting)
Part number	V13H010L66

Remote Control

Range	Approximately 30 feet (10 m)
Batteries	AA × 2

Dimensions

Height	6.9 inches (175 mm), not including adjustable feet
Width	17.3 inches (440 mm)
Depth	14.6 inches (370 mm); not including lens protrusion
Weight	19.8 lb (9.0 kg)

Electrical

Rated frequency	50/60 Hz AC
Power supply	100 to 120 V AC, 2.9 A 200 to 240 V AC, 1.3 A
Power consumption	100 to 120 V: Operating: 291 W (Power Consumption: Normal) Operating: 243 W (Power Consumption: ECO) Standby (network on): 8.8 W (Pro Cinema 61000 only) Sleep mode (off): 0.17 W 220 to 240 V: Operating: 280 W (Power Consumption: Normal) Operating: 235 W (Power Consumption: ECO) Standby (network on): 9.7 W (Pro Cinema 61000 only) Sleep mode (off): 0.27 W

Environmental

Temperature	Operating: 41 to 95 °F (5 to 35 °C) Storage: 14 to 140 °F (–10 to 60 °C)
Humidity	Operating: 20 to 80% RH, non-condensing Storage: 10 to 90% RH, non-condensing
Operating altitude	Up to 7500 feet (2286 meters) Over 4900 feet (1500 meters), enable High Altitude mode in the Settings menu (see page 46)

Safety

United States

FCC Part 15B Class B (DoC)
UL60950-1

Canada

ICES-003 Class B
CSA C22.2 No. 60950-1



Pixelworks DNX™ ICs are used in this projector.

Compatible Video Formats

The projector supports analog video in NTSC, PAL, and SECAM formats, and it automatically adjusts to the incoming signal. It can receive these formats as composite video, S-video, or component video—which it accepts through the Video, S-Video, and Component ports, respectively.

The projector also supports digital video (SDTV, HDTV) and various monitor display formats. Digital video is accepted by the HDMI and Component video ports. The PC port accepts analog RGB computer monitor signals.

If necessary, you can select a different Aspect setting to optimize the image. The resolution at which the image displays for a given setting depends on the currently active picture source, as listed in the following tables.

Composite video or S-Video

Format	Refresh rate (Hz)	Resolution
NTSC NTSC 4.43	60	720 × 480
PAL N-PAL	50	720 × 576
M-PAL PAL60	60	720 × 576
SECAM	50/60	720 × 576

Component video

Format/ Signal	Refresh rate (Hz)	Resolution
SDTV		
480i	60	720 × 480
576i	50	720 × 576
480p	60	720 × 480
576p	50	720 × 576

Format/ Signal	Refresh rate (Hz)	Resolution
HDTV		
720p	50/60	1280 × 720
1080i	50/60	1920 × 1080
1080p	50/60	1920 × 1080

Analog RGB (computer display)

Signal	Refresh rate (Hz)	Resolution
VGA	60/72/75/85	640 × 480
SVGA	56/60/72/ 75/85	800 × 600
XGA	60/70/75/85	1024 × 768
SXGA	70/75/85 60/75/85 60/75/85	1152 × 864 1280 × 960 1280 × 1024
WXGA	60 60 60/75/85 60/75/85	1280 × 768 1360 × 768 1280 × 800 1400 × 900
SXGA	60/75	1400 × 1050
UXGA	60	1600 × 1200
WSXGA	60	1680 × 1050
WUXGA	60	1920 × 1200
MAC13"	67	640 × 480
MAC16"	75	832 × 624
MAC19"	59/75	1024 × 768
MAC21"	75	1152 × 870

HDMI

Signal	Refresh rate (Hz)	Resolution
VGA	60	640 × 480
SDTV		
480i	60	720 × 480
576i	50	720 × 576
480p	60	720 × 480
576p	50	720 × 576
HDTV		
720p	50/60	1280 × 720
1080i	50/60	1920 × 1080
1080p	24/30/50/60	1920 × 1080

ESC/VP21 Command Codes

You can use an AV controller with a 9-pin null modem serial cable to control the projector. You can download the complete *ESC/VP 21 Communication Manual* for home theater projectors from the Epson website at www.epson.com/support. Following are some of the available codes:

Item		Command	
Power ON/OFF	ON	PWR ON	
	OFF	PWR OFF	
A/V Mute ON/OFF	ON	MUTE ON	
	OFF	MUTE OFF	
A/V Mute selection	Black	MSEL 00	
	Blue	MSEL 01	
Source change	Terminal	Signal name	
	Component	Component video	SOURCE 10
		YCbCr	SOURCE 14
		YPbPr	SOURCE 15
		Auto	SOURCE 1F
	PC	HDB15	SOURCE 20
		RGB	SOURCE 21
	HDMI 1	HDMI 1	SOURCE 30
	Video	Video/S-Video	SOURCE 40
		Video (RCA)	SOURCE 41
		S-Video	SOURCE 42
	HDMI 2	HDMI 2	SOURCE A0
Color Mode	Dynamic		CMODE 06
	Living Room		CMODE 0C
	THX		CMODE 13
	Cinema		CMODE 15
	x.v.Color		CMODE 0B
Aspect ratio	Normal		ASPECT 00
	Full		ASPECT 40
	Zoom		ASPECT 50
	Wide		ASPECT 70
	Anamorphic Wide		ASPECT 80
	Horiz. Squeeze		ASPECT 90

Notices

Important Safety Information

Follow these safety instructions when setting up and using the projector:

- Never look into the projector lens when the lamp is turned on; the bright light can damage your eyes. Never let children look into the lens when it is on.
- Never open any cover on the projector, except the lamp and filter covers. Dangerous electrical voltages inside the projector can severely injure you.
- Except as specifically explained in this *User's Guide*, do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
- The projector and its accessories come packaged in plastic bags. Keep plastic bags away from small children to avoid any risk of suffocation.
- Don't place the projector on an unstable cart, stand, or table. Also, don't use the projector near water or sources of heat.
- Use the type of power source indicated on the projector. If you're not sure of the power available, consult your dealer or power company.
- Place the projector near a wall outlet where the plug can be easily unplugged.
- Don't insert the plug into an outlet with dust present, and insert the plug firmly into the outlet. Failure to do so could result in sparks or fire.
- Don't overload wall outlets, extension cords, or integral convenience receptacles. This can cause fire or electric shock.
- Don't block the slots and openings in the projector case. They provide ventilation and prevent the projector from overheating. Don't operate the projector on a sofa, rug, or other soft surface, or in a closed-in cabinet unless proper ventilation is provided.
- Never push objects through the cabinet slots or spill liquid into the projector.
- Unplug the projector from the wall outlet and refer servicing to qualified service personnel under the following conditions: when the power cord or plug is damaged or frayed; if liquid has been spilled into the projector, or if it has been exposed to rain or water; if it doesn't operate normally when you follow the operating instructions, or if it exhibits a distinct change in performance, indicating a need for service; if it has been dropped or the housing has been damaged.
- Don't place the projector where the cord can be walked on. This may result in fraying or damage to the plug.
- Unplug the projector from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.

- ☿ The lamp(s) in this product contain mercury. Please consult your state and local regulations regarding disposal or recycling. Do not put in the trash.
- Allow the lamp to cool for one hour before replacing it.
- Unplug the projector during lightning storms or when not in use for extended periods.
- Don't place the projector or remote control on top of heat-producing equipment.
- If you use the projector in a country other than where you purchased it, use the correct power cord for that country.
- Don't stand on the projector or place heavy objects on it.
- Don't use the projector outside of the required temperature range of 41 to 95 °F (5 to 35 °C). Doing so may cause an unstable display and could lead to projector damage.
- Don't store the projector outside of the required temperature range of 14 to 140 °F (–10 to 60 °C) or in direct sunlight for long periods of time. Doing so may cause damage to the case.

WARNING: The cords included with this product contain chemicals, including lead, known to the State of California to cause birth defects or other reproductive harm. *Wash hands after handling.* (This notice is provided in accordance with Proposition 65 in Cal. Health & Safety Code § 25249.5 and following.)

FCC Compliance Statement

For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC Certification of this device and may cause interference levels which exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If this equipment has more than one interface connector, do not leave cables connected to unused interfaces. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

For Canadian Users

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Declaration of Conformity

According to 47CFR, Part 2 and 15 for Class B Personal Computers and Peripherals; and/or CPU Boards and Power Supplies used with Class B Personal Computers:

We: Epson America, Inc.
Located at: 3840 Kilroy Airport Way
MS 3-13
Long Beach, CA 90806-2469
Telephone: (562) 290-5254

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR §2.909. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trade Name: Epson
Type of Product: Projector
Model: H417A/H359A
Marketing Name: PowerLite Pro Cinema 31000/Pro Cinema 61000

Epson America, Inc. Limited Warranty

Three-Year Projector Limited Warranty and 90-Day Lamp Limited Warranty

What Is Covered: Epson America, Inc. (“Epson”) warrants to the original retail purchaser of the Epson projector product enclosed with this limited warranty statement that the product, if purchased new and operated in the United States, Canada, or Puerto Rico will be free from defects in workmanship and materials for a period of three (3) years from the date of original purchase. This limited warranty applies only to the projector and not to the projector lamp, which carries a limited warranty period of ninety (90) days from the date of original purchase. For warranty service, you must provide proof of the date of original purchase.

What Epson Will Do To Correct Problems: If your product requires service during the limited warranty period, please call Epson at the number on the bottom of this statement and be prepared to provide the model, serial number, and date of original purchase. Epson will, at its option, repair or replace the defective unit, without charge for parts or labor. When warranty service involves the exchange of the product or of a part, the item replaced becomes Epson property. The exchanged product or part may be new or refurbished to the Epson standard of quality, and at Epson’s option, the replacement may be another model of like kind and quality. Epson’s liability for replacement of the covered product will not exceed the original retail selling price of the covered product. Exchange or replacement products or parts assume the remaining warranty period of the product covered by this limited warranty. If Epson replaces the lamp as part of the warranty service, the replacement lamp carries the limited 90-day warranty stated above.

What This Warranty Does Not Cover: This warranty covers only normal use in the United States, Canada or Puerto Rico. Twenty-four hours per day or other excessive continual use is not considered normal use. This warranty does not cover consumables such as filters. This warranty is not transferable. Epson is not responsible for warranty service should the Epson label or logo or the rating label or serial number be removed. Epson is not responsible for warranty service should the product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters such as fire, flood, and lightning, improper electrical current, software problems, interaction with non-Epson products, or service other than by Epson or an Epson Authorized Servicer. Postage, insurance, or shipping costs incurred in presenting your Epson product for carry-in warranty service are your responsibility. Epson will pay for all freight charges if you choose to send your unit to Epson for repair. If a claimed defect cannot be identified or reproduced in service, you will be held responsible for costs incurred.

THE WARRANTY AND REMEDY PROVIDED ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL

OTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SOME LAWS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES. IF THESE LAWS APPLY, THEN ALL EXPRESS AND IMPLIED WARRANTIES ARE LIMITED

TO THE WARRANTY PERIOD IDENTIFIED ABOVE. UNLESS STATED HEREIN, ANY STATEMENTS OR REPRESENTATIONS MADE BY ANY OTHER PERSON OR FIRM ARE VOID. IN THE EVENT THE REMEDIES ABOVE FAIL, EPSON'S ENTIRE LIABILITY SHALL BE LIMITED TO A REFUND OF THE PRICE PAID FOR THE EPSON PRODUCT COVERED BY THIS LIMITED WARRANTY. EXCEPT AS PROVIDED IN THIS WRITTEN WARRANTY, NEITHER EPSON AMERICA, INC. NOR ITS AFFILIATES SHALL BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OR INABILITY TO USE THE EPSON PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY OR ANY OTHER LEGAL THEORY.

In Canada, warranties include both warranties and conditions.

Some jurisdictions do not allow limitations on how long an implied warranty lasts and some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction.

To find the Epson Authorized Reseller nearest you, please visit our website at: www.epson.com.

To find the Epson Customer Care Center nearest you, please visit www.epson.com/support.

To contact the Epson ConnectionSM, please call (800) 637-7661 + PIN or (562) 276-4394 in the U.S. and (905) 709-3839 in Canada or write to Epson America, Inc., P.O. Box 93012, Long Beach, CA 90809-3012.

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